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Multispecies Communities and Narratives

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Introduction

Irina Frasin*

People have always been curious to find intelligent forms of life anywhere in the universe. Questioning whether we are or not alone in the infinity of space and time has driven us to space programmes that search for extraterrestrial life. But even today some of us are still reluctant to see the richness of life on Earth, its diversity and complexity, populated by creatures who can share our curiosity. But by becoming increasingly aware that we are truly not alone, we may understand that we share the planet with other forms of life that are also intelligent and affectionate, shape strong community ties, form families, and develop cultures and complex models of communication. Only when we challenge human exceptionalism, we are open to discovering the other myriad forms of life, communities, cultures, relationships or, to put it in one word, the other-than-human worlds.

When we reframe our thinking to acknowledge and recognize other forms of intelligence, emotions, and languages that don't resemble our own, we are facing the promise of changing the current state of affairs. To truly take the non-human animals' matter seriously we need to break away from anthropocentric thinking. Thus, we must question whether and how our own all-too-human limitations tie us to what we can imagine and wish for. When we take other animals seriously, we discover more than their extraordinary lives and communities, we see their potential to demolish the barriers of our own thinking and change our world.

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The studies collected in the present volume address these challenges and, in fascinating ways, make efforts to understand and relate to the minds of other beings to truly listen and communicate. When we separated ourselves from nature, estranging ourselves from the other animals, we lost our ability to relate, to respond, to connect. The authors of the present volume make efforts to rediscover these long-lost connections, to exercise dormant abilities, to awaken our empathy and sense of togetherness. New ways of investigation are presented, and new research methods are explored, all with the deep conviction that even if we fail to reach our audacious goals we are still at a win.

The book opens with a chapter on free-ranging dogs and dog-human relationships questioning our current understanding of dog welfare and our current practices regarding their care. Marco Adda, a friend and excellent connoisseur of free-ranging dogs, urges us to make an effort and try to see things from the dogs' point of view. This is something that may be found all along throughout this volume, an effort to challenge the common ideas, uncover the stereotypes, change perspectives, and search for new kinds of knowledge. The next study, signed by Liviu Adrian Măgurianu and Daniel Măgurianu, takes us to a fascinating exploration of human-animal communication. We are all changing information with others, we are all making efforts to better comprehend them and thus this chapter opens before us new ways of understanding communication and connectedness.

The following chapters explore artistic methods as new ways to investigate and find meanings that otherwise might be silenced by classical scientific research methods. Jessica Ullrich is bringing forward artistic projects exploring interspecies communication. The otherness of different species is investigated through language, emotion, art, and other kinds of embodied cognition. Gisje Heemskerk, an artist herself and part of the Multispecies Collective, is challenging the idea that only

humans make art by an elaborate presentation of hers and her collective artwork. Kristine Hill is also exploring a kind of art, speculative fiction, to better connect to and understand the cats that she loves and works with. In an extraordinary struggle to understand the cats' perspective, the author is making the effort to train her ethologic imagination, to explore the limits of what might be known or understood. My own study coming next, is also about cats, my relationship with them, and my own attempt to use artistic methods to better understand and connect to the community cats.

The next two studies offer an ethnographic, historical, and archaeological perspective on our relationship with the other animals. Gabriel Șerban explores the imagery of the stag in local and worldwide folklore, mythology, legends, literature, and art. George Bodi and Loredana Solcan present us a fascinating analysis of connections, representations, and relationships between prehistoric humans and their cattle. All along, throughout our long history and in the present, our relationships with the other animals have been far more complex and stranger than what first meets the eye. The narratives we use to talk of us, them, and our human-animal interactions are of utmost importance, and discovering these stories, analysing them, challenging established interpretations, and reinterpreting the data, is permanently accompanied by hope to renew our broken ties.

Teaching this to future generations is crucial and thus the coming chapters address exactly this challenge and support spreading humane education, cultivating empathy and compassion, and reshaping our interactions with the other animals. Alina Rusu is a professor and a pioneer in bringing the field of human-animal interactions into Romanian universities. Her study further shows us the need to continue this trend, to further motivate and educate towards a compassionate co-existence. Mara Dezmirean is preoccupied with fighting animal cruelty and thus promotes programmes for teenagers

to address this issue and encourage empathy, compassion, and understanding. The essay of Cosmin Mărtinaș, a philosophy graduate, leads us through a thought experiment to investigate connections between animals and the law and argues against any form of oppression and exploitation.

What must be truly clear in the end is that we must rediscover our ties with the rest of the animal species and the more-than-human world. Surpassing our hubris and arrogance we have to make the effort towards connectedness, towards equality, towards respect. All multispecies communities recognize the multitude of life forms and make efforts to accommodate them. When we create spaces for other beings in our human world, we explore our capacity to relate to others; and this newfound connectedness, openness, and vulnerability brings the promise of unforeseen possibilities. Until now, we have had the desire to control the larger-than-human world, yet we have come to realise that such control is just an illusion. All the other non-humans around us are as much a part of this web of life as we are. To find peace, balance, and prosperity we need to rediscover this sense of connectedness that requires us to make space for all the others beside us.

Wellness or Hellness? Rediscussing Free-Ranging Dogs Welfare

Marco Adda*

Abstract

In many places worldwide, the presence of free-ranging dogs raises discussions about canine welfare and its impact on human communities. Conventional strategies displayed by organisations and individuals often prioritise the removal of healthy dogs from their natural landscape, believing that relocating or facilitating their adoption is in the best interest of both the dogs and humans. However, this approach can sometimes reflect a human-centred perspective, placing human viewpoints and interests above non-human animals' values and well-being.

The abrupt removal of dogs may disrupt their individual balance and social structures and expose them to novel risks. The stress and emotional damage often encountered by dogs relocated to unfamiliar places is considerable. This potentially leads to significantly compromised welfare. Traumatic traits and PTSD emerge, leading frequently to poor adaptation, severe behavioural issues, and sometimes euthanasia.

This work explores some intricacies of the "free-ranging dog removal" phenomenon. It tracks some trajectories in dogs' human-triggered migration. It challenges the presumption that extracting these dogs from their habitats enhances their quality of life. It contends that the well-being of free-ranging dogs deeply intertwines with the socioecological systems they inhabit. It examines two case scenarios to showcase some dynamics. It highlights some negative consequences of the phenomenon. It suggests some interdisciplinary trajectories to reframe the perception of free-ranging dogs, to cultivate a more ethical and compassionate understanding of their well-being, and to recognise dogs' agency and, by extension, the agency of all species that coexist within the human-dominated landscapes.

Keywords

free-ranging dogs, human-animal interaction, dog adoption, dog welfare, animal wellbeing, anthropocentrism, speciesism, species coexistence, anthrozoology

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Introduction

Some free-ranging dogs thrive living without confinement or restriction. However, circumstances may arise where intervention is necessary to support the injured, malnourished animals, and medical attention may be required to address health concerns and other critical needs. In such instances, keeping dogs in their free-ranging lifestyle may not be feasible, and relocation to a shelter, clinic, or other suitable environments may be necessary. This type of intervention relates to a portion of the global free-ranging dog population. In contrast, many free-ranging dogs are healthy, behaviourally balanced, and well-integrated into their environments.

This work focuses on free-ranging dogs in good health. It investigates the phenomenon of removing these dogs from their familiar surroundings and relocating them to unfamiliar places – in the name of animal welfare, and how such practice can lead to significant stress and emotional harm. This requires attention and consideration.



The image portrays three settings where free-ranging dogs live in good biopsychosocial balance. On the left are dogs in Laos (Photo: Cathirose Petrone / AEDC Archive), Iasi-Romania at the centre, and Bali-Indonesia on the right (Photos: Marco Adda / AEDC Archive). Those free-ranging dogs live happily, have a canine family, associate with some people, and fully integrate into their environments. By living without restraint or interference, those dogs have autonomy and agency.

Methods and approaches

Gathering information on transferring free-ranging dogs to unfamiliar environments is challenging, requires a multifaceted approach, and relies on various methodologies.

Personal communications are crucial, as they provide valuable insights from individuals directly involved in or knowledgeable about these transfers. By engaging with veterinarians, animal welfare organisations, local authorities, and community members, I gathered first-hand accounts, anecdotes, and observations, contributing to a more comprehensive understanding of the phenomenon. These communications offer nuanced perspectives on the motivations behind the transfers, the methods employed, and the welfare implications for the dogs involved.

Internet research allowed access to information through news articles, social media platforms, and online forums. Targeted searches and analysis of digital contents revealed sensitive information, trends and patterns related to the transfer of free-ranging dogs. Online sources provide a vast repository of information, offering additional insights into the dynamics of these transfers.

Open interviews provided an opportunity to engage with individuals affected by or involved in transferring free-ranging dogs. By conducting structured or semi-structured interviews with animal rescuers, transporters, community members, and adopters, this work elicits accounts of their experiences and perspectives.

Comparative studies across species and ecosystems provide valuable insights into evolutionary continuity (Benvenuti 2017) and adaptive strategies of animals facing trauma and PTSD, shedding light on the potential consequences of relocating free-ranging dogs to unfamiliar environments.

Lastly, this research is informed by my long-term commitment to studying free-ranging dogs - monitoring their behaviour and

interaction with humans in different societies worldwide, and my work as a dog behaviour consultant.

Free-ranging or ranging free?

"Free-ranging" is not a convenient label for dogs. It typically implies animals that roam freely without confinement. It often carries connotations of wildness or uncontrolled independence, prompting human efforts to regulate, domesticate, "save", or remove dogs from their natural lifestyle. Thus, "free-ranging" and "stray" frequently legitimise interventions to manage animal populations to comply with human interests and public health (see Raynor et al. 2020; Cunha Silva et al. 2022).

However, flipping terms flips perspectives. "Ranging free" offers a different perception, emphasising the inherent right of animals to remain free within their natural habitats. Rather than viewing freedom of movement as an issue, "ranging free" acknowledges and respects the autonomy and agency of animals to roam and explore their environments. It underscores the ethical imperative to recognise and uphold animal autonomy. This view fosters coexistence rather than control in our relationship with the natural world. We refer to this view when discussing dogs, regardless of whether the expression "free-ranging" or "ranging free" is used.

Further, the notion of free-ranging animals frequently links to forsakenness, disregard, and inadequate attention. However, this presumption is only valid in some cases since numerous dogs thrive when granted the sovereignty to roam free (Adda 2024a; Pierce & Bekoff 2021). The liberty to explore and traverse their environment, to bond with other conspecifics, to choose the humans with whom to interact, to discern what is dangerous or not, and to decide what to eat and where to sleep are crucial components of dogs' existence.

Yet, ranging free dogs, although in optimal health, prompt some individuals with a desire to intervene and "save" those animals. Such inclination may reflect biased perceptions, linking to the debatable concept of domestication (Adda 2021; Bekoff 2022) and embodying a phenomenon known as Anthrozooalgia[1] (Adda 2022). "Saving" dogs may also reveal anthropocentric views that prioritise human perspectives and interests over those of the animals involved and impose human-centric solutions without fully understanding the needs and behaviours of the dogs. While the intention to rescue and provide care for free-ranging dogs may stem from genuine compassion, it is essential to understand the inherent power dynamics in human-animal interactions.

The desire to remove free-ranging dogs from their natural living environment and place them in human homes as companions is widespread. This practice involves planning a new living condition for these animals, which is believed to be healthier than their free-ranging lifestyle. These new homes may be far from the areas where the dogs originally lived, possibly in another part of the world. Removing dogs from their natural environment and relocating them to unfamiliar settings disrupts their social structures and natural behaviours. This intervention can lead to unintended outcomes, including stress, trauma, challenges in adaptation, and other severe consequences, including euthanasia.

[1] The term encompasses the complex emotional connection between humans and animals, including the empathy and compassion humans feel toward needy animals. Anthrozooalgia reflects a spectrum of emotions, ranging from sympathy and altruism to a sense of responsibility and duty towards animal welfare, often leading to actions aimed at alleviating the suffering or improving the well-being of animals.

Migrations

This map features movements associated with free-ranging dog removal[2]. It indicates some of the identified routes. The best efforts have been made to ensure the reliability of the information provided, although some sources cannot be disclosed for confidentiality. Some details may require additional research.



The map provides some examples of free-ranging dogs' removal and human-triggered migration. It is informed by years of fieldwork, personal communications, and internet research. Its information should be interpreted cautiously due to potential inaccuracies.

Reportedly, Bali has a significant population of free-ranging dogs (Corrieri et al. 2018), and there are individuals and organisations keen on relocating them elsewhere, especially after a rabies outbreak in 2008

[2] It is worth recalling that the migrations of dogs and people have been mutually influenced throughout history. Dogs lived alongside human hunter-gatherers and later settled as domesticated animals (for an exhaustive overview of domestication, see Miklósi 2017, pp. 124-152).

prohibited their direct exportation from the island. Covert operations seem to exist, with dogs found hidden inside vehicles and transported to maritime terminals to circumvent these regulatory obstacles (*Living in Indonesia Forum*; Derek 2020). Upon reaching Java, a coordinated effort transfers the dogs to awaiting vehicles, allowing their eventual arrival in Jakarta. After traversing a lengthy two-day journey by car and boat, the dogs undergo a bureaucratic transformation, transitioning from Bali dogs to officially recognised Javanese canines, ostensibly to bypass the regulatory restrictions. The strategic manoeuvre enables the subsequent airlift of dogs to various destinations in Asia and Europe, including the United Kingdom and the Netherlands. Jakarta represents a pivotal hub for facilitating the transcontinental transit of these dogs to other countries. There is a well-known interest in rescuing Bali dogs in several regions of Australia, such as Perth, Melbourne, and Brisbane. Occasionally, onward transfers extend to New Zealand (*personal communications*).

The abundant flights between Jakarta and the Netherlands facilitate canine shipments to Europe. Jakarta and the Netherlands are intermediary hubs for canine transfers extending beyond European borders, including North America. The United States and Canada emerged as prominent recipients of free-ranging dogs from various global origins, including India, South Korea, and China[3].

Within Europe, dogs are allegedly removed from the streets for reasons of welfare or due to public disturbances in countries such as Moldova, Romania, Poland, and others. Significant events like dog bites may also prompt removing dogs from the streets *(BBC)*. Dogs

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[3] There is a widespread concern over the Yulin festivals and China's prevalent dog meat trade. Disparate and desperate entities and individuals are said to arrange to relocate dogs to alternative regions. However, such efforts reportedly encounter regulatory and logistical hurdles, necessitating innovative strategies for execution.

from Greece, Montenegro, Albania, and Croatia are exported to central Europe, often channelling through Italy. Also, debates arise over the shipment of dogs from southern to northern Italy, with concerns raised about disrupting dogs' natural habitats. This will be discussed further in a case scenario. Spain and Portugal also participate in the continental dog migration *(PetForum)*.

People in the UK seem to adopt dogs from Romania, Hungary, Cyprus, Greece, Thailand (Carter 2016; Ruzicka 2020), and Portugal (Sousa Rebolo 2022).

Before the recent resurge of the Israeli-Palestinian conflict, from areas of Lebanon, Syria, and Iraq, dogs were transported to Israel, which served as a transit point for onward shipment to Canada and the United States (*personal communication*). Some dogs from Egypt are shipped to Canada, too (*personal communication*).

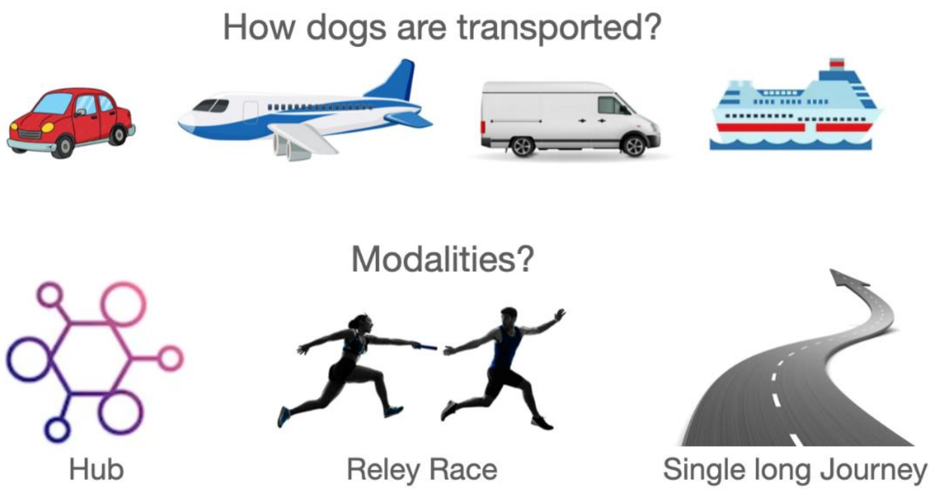
Reports suggest that dogs from Costa Rica are transported to Mexico, a hub for further conveyance into the United States. Dogs from Mexico cross the border into California - passing from Tijuana to San Diego, to be carried by plane elsewhere in the United States (*Amigos de los Animales de Guanajuato*; *personal communication*; *Pets That Travel*).

Additionally, in Canada, free-ranging dogs from indigenous reserves are removed from their lifestyle and face severe difficulties adapting to new environments (Bell & Martin 2019; MacDonald et al. 2024). This, too, will be further discussed in a case scenario.

Transportation

Free-ranging dogs – removed from family, friends, and other group members — are transported to a completely different environment through long journeys, using various modes including cars, vans, planes, and boats. As mentioned, specific locations such as Indonesia, Italy, Israel, and Mexico, have emerged as dog destinations and transit hubs. The process of transporting dogs can often be a relay

race, with individuals organising themselves by car to ensure the timely arrival of the animals at their intended destination. For example, an individual drives 150 miles to bring the dog to a particular location. Another individual then arrives to take the dog and drive the next leg of the journey, covering another 150 miles or more. This process may be repeated multiple times until the dogs reach their destination, hundreds of miles from the starting point. This mode of transportation can be highly stressful for a dog, and the logistics must be carefully planned. The ethical implications of transporting dogs across long distances must be examined. While the animal's well-being must be a top priority, it is essential to approach this topic with sensitivity and respect for all parties involved.



Dogs Relocation: Transportation and Modalities - AEDC© Anthrozoology Education Dogs Canines 2023

What do those dogs consider "home"?

Once they reach their destination, dogs may be assigned to a human family with the best intentions of providing them with a better life without knowing their history, behaviour, background, or needs. The implications of this process are profound, particularly for the animals involved. In the name of animal welfare, healthy village dogs

are kidnapped, neutered, vaccinated, shipped, and sent somewhere like a postal parcel. It is no exaggeration to say that dogs are deported, torn from their natural life, territory, family, group, and freedom, and relegated to a city apartment, held in home captivity, without other dogs around them, among toys they do not play with and balls they do not chase.

The importance of natural environments cannot be emphasised enough. Ratuski and Weary (2022) demonstrated that while we may observe enriched environments in rats in both house and lab settings, no laboratory-created environment can match the enrichment provided by a free-ranging rat's natural habitat. It was further noted that the prefrontal cortex development of a free-ranging rat is much more extensive and significant than that of a laboratory rat, no matter how much enrichment is provided to the latter. The prefrontal cortex plays a crucial role in social communication, stress reduction, and other vital functions. Considering the importance of natural environments for the development of animals, confining free dogs to indoor or urban environments has to be questioned. As observed in rats, restricting these dogs can negatively impact their behaviour by increasing their prey drive, reactiveness, and aggressiveness toward unfamiliar people (Corrieri et al. 2018), decreasing their overall physical, mental, and emotional well-being.

Dogs who are not allowed to engage in natural behaviours such as exploring, socialising, and exercising can suffer from boredom, anxiety (Sherman 2008), and depression. They need access to a natural environment to develop cognitive and behavioural skills. Further, dogs who have been denied their freedom, have gone through a traumatic journey and find themselves in a new and unfamiliar environment, may develop PTSD. Adopters may not understand the behaviour of such dogs, and well-intentioned attempts to help them can sometimes aggravate the situation. Behavioural consultants and dog trainers may

sometimes struggle and apply inappropriate strategies. These intricacies may be unnoticed by veterinarians, too, who may prescribe ineffective or improper medication.

A common misconception is that spaying or neutering dogs can reduce their aggressiveness. On the contrary, multiple studies have shown how neutered dogs can develop aggressiveness toward people (Dinwoodie et al. 2019; Guy et al. 2001; Liinamo et al. 2007) and other dogs (Flint et al. 2017). Further, a large study involving 13,795 dogs showed that dogs neutered between 7 and 12 months of age were more likely to show aggression against strangers than those neutered later, at 18 months, or who were not neutered (Farhoody et al. 2018). Thus, the surgical intervention on some dogs, alongside the struggle associated with such a process - and the previous struggles, may lead to dog behaviours that are hard to interpret and handle.

Those difficult circumstances, especially when aggression is involved, may lead to euthanising healthy dogs. While Bekoff (2012) names *zoothanasia* the practice of euthanising healthy animals in zoos, it is also appropriate to apply the term to healthy immigrant dogs whose behaviour is misinterpreted and do not fit into new environments.

Canine trauma and PTSD

Canine trauma is a severe issue arising when dogs are subjected to stressful or traumatic experiences. Such experiences can profoundly impact their physical, emotional, and mental well-being.

In general, many dogs are exposed to traumatic events such as abuse, neglect, abandonment, and confinement, leading to long-lasting behavioural complications. Much of that abuse relates to domestic violence (Newberry 2017; Plant et al. 2019). Hence, the removal of dogs from the streets, the stressful journey, and their subsequent relocation to unfamiliar environments can have severe effects on their well-being,

leading to canine trauma and canine post-traumatic stress disorder (PTSD). Free-roaming dogs experience intense stress when abruptly taken from their familiar territories and forcibly transported to new locations. The traumatic experience of being kidnapped and the drastic changes in their lifestyle can trigger these dogs' fear, confusion, emotional withdrawal, and aggressiveness. The sudden separation from their conspecifics or familiar human caregivers can also exacerbate their distress. As highly social creatures, dogs rely on their social bonds and environmental familiarity for emotional stability. A keen understanding of their behaviour and social ecology is needed when interacting with them and influencing their lifestyle (see Daniels & Bekoff 1989; Boitani et al. 2007; Bonanni et al. 2010; Gompper 2014). Thus, it is crucial to consider the potential psychological impact on these animals and implement strategies that prioritise their emotional well-being.

Consequent to dogs' struggles, various behaviours warrant attention and understanding. These include trembling and shaking, excessive fear even in non-threatening circumstances, and frequent barking without apparent cause. Dogs may also exhibit constant hiding, hypervigilance, and a reluctance to leave the caregiver's side, signalling insecure attachment (see Rusu et al. 2019). Shyness and aggression towards other animals and people, hesitation in specific environments, preventative aggression during outdoor walks, hyper-reactivity to handling, and fear-induced urination in the presence of strangers further compound these challenges. Such issues are often combined with common complications, including mismatches between dogs and their human families, misunderstandings of dog behaviour, inadequate interactions and training, inappropriate medication, and unsupportive environments characterised by, for example, the barking of other dogs, complaints from neighbours for their behaviour, or discrimination by people such as zoo-xenophobia

(Rahman 2018; Oxley et al. 2022). These challenges can sometimes culminate in taking the severe decision of euthanasia, further highlighting the urgency of addressing and understanding these issues.

In summary, “saved” dogs may experience the following:

- Sudden removal from the free-ranging lifestyle
- Transition period in shelters, in poor condition (this sometimes may last for years or the entire dog’s life)
- Invasive treatment and vaccination
- Sudden spaying/neutering - to supposedly facilitate adoption, with drastic hormonal change and possible development of aggressiveness
- Long multi-transportations journey
- Handling from people with a low understanding of free-ranging dogs’ behaviour and dogs’ personalities
- Poor evaluation and assignment to the new human family and environment; misunderstanding of dog behaviour by adopters and other people; unsupportive environment (dog barking and people complaining, etc.); inappropriate interaction (with other dogs and people)
- Discrimination (from people who do not like dogs coming from abroad)
- Puzzling and inappropriate dog training
- Inopportune medical treatment for behaviour
- Euthanasia

Given the traumatic circumstances free-ranging dogs meet, analogous human experiences are worth considering. Literature examining the psychological impact of war on veterans offers valuable insights into coping mechanisms, PTSD symptoms, and strategies for resilience (Kredlow et al. 2022; Pottie et al. 2011; Rasmussen et al. 2007),

which can shed light on shared vulnerabilities, and inform interventions for traumatised dogs. Similarly, studies on the experiences of immigrants navigating unfamiliar environments and the psychological toll of deportation (see Brabeck et al. 2014; Crepet et al. 2017) can provide relevant frameworks for understanding the challenges faced by kidnapped and relocated dogs. This offers a poignant perspective on displacement and its impact on mental health. Also, it is relevant to consider that animals experience collective trauma (Bekoff 2022). Examining these diverse perspectives provokes critical reflection and raises awareness of free-ranging dogs' complex needs.

Two case studies

The following case studies offer insightful glimpses into complex phenomena that resonate beyond their specific contexts, offering broader insights into overarching themes and dynamics. In other words, these examples reflect broader trends and complexities. Each case study presents a unique lens to explore fundamental aspects of human behaviour, societal structures, and the intricate interplay between individuals and their environments.

Case 1: Italy, neighbourhood dogs, and the "staffette" phenomenon

Firstly, it is worth noting that many regional regulations recognise dogs' right to remain free in Italy. Where there are no dangerous conditions for humans, animals and things, dogs are granted the right to be free animals. This animal is called a "cane di quartiere" (neighbourhood or village dog).

For example, in the regional law "REGIONE LAZIO - L.R. numero 34 - art.9 dell'anno 1997", we can read that "It is recognised the dog's right to life in conditions of well-being both in a state of freedom and during the period of hospitality in kennels". This echoes similar

laws from other Italian regions such as: REGIONE LIGURIA - L.R. numero 23 - art. 18 dell'anno 2000; REGIONE SARDEGNA - Delibera numero 17/39 art. 9 dell'anno 2010; REGIONE MOLISE - L.R. numero 12 art. 7-ter dell'anno 2011; REGIONE CALABRIA - Proposta di legge numero 530 dell'anno 2014; REGIONE BASILICATA - L.R. numero 46 art.20 dell'anno 2018; REGIONE CAMPANIA - L.R. numero 3 art. 13 dell'anno 2019; REGIONE PUGLIA - L.R. numero 2 art.17 dell'anno 2020; and REGIONE SICILIA - L.R. numero 15 art. 14 dell'anno 2022.

Despite those laws allowing the presence of healthy free-ranging dogs in urban and suburban territories, removing fully healthy dogs (and cats) and transporting them from Southern to Northern Italy for adoption, known as “staffette” (relay race), is a widespread practice.

Additionally, a misconception regarding free-ranging dogs in many urban and suburban areas complicates the picture. Some people, lacking an understanding of canine behaviour and their fundamental need for freedom, report dogs to authorities, expressing concerns about safety and labelling the animals as dangerous solely based on their unsupervised status. By assuming that a dog ranging free is inherently dangerous simply because it is not under human supervision, these individuals - and the intervening authorities, overlook the complex dynamics of canine behaviour and the importance of dogs' autonomy. The tendency to prioritise human perceptions above the well-being and rights of animals reflects speciesism. It perpetuates a harmful hierarchy that undermines efforts to promote coexistence and understanding between humans and dogs.

In Southern Italy, companion animal abandonment — in our case dogs and cats, coupled with low rates of identification and registration presents a pressing concern. Amidst this ongoing territorial emergency, associations and volunteers recurringly organise those “staffette” to facilitate the movement of animals from Southern Italy to the North. Nevertheless, the outcomes of such transport are not

uniformly favourable. Thus, it prompts inquiry into whether this practice should be considered beneficial for the animals and whether the phenomenon facilitates animal adoptions or necessitates scrutiny of its operational modalities.

The first and foremost issue relates to the legitimacy of removing those dogs from their natural environment. This often reflects volunteers' needs and personalities. A study (d’Ingeo et al. 2022) sheds light on this aspect:

> We found a high activation of self-sacrifice (71 subjects, 58.20%), strict standards/hypercriticism (41 subjects, 33.61%), abandonment (28 subjects, 22.95%), pretensions/grandiosity (27 subjects, 22.13%), and distrust/abuse (22 subjects, 19%) schemas in the total population. Considering that abandonment, pretensions/grandiosity, and distrust/abuse are classified as unconditional or primary schemas (whereas self-sacrifice and strict standards/hypercriticism are conditioned or secondary), their activation provides interesting insight into the motivations behind volunteers’ behaviour toward dogs. Broadly speaking, the activation of schemas determines how a person relates to others during social interactions. The activation of the abandonment schema, which reflects the subject’s abandonment issues, could increase the need for physical closeness and lead to the expression of overprotective behaviours. In these subjects, the fear of being abandoned is reflected onto the animals, thus making the need to protect them from danger and loneliness becomes of primary importance. [...] Our study suggests that volunteers’ psychological features should be taken into account since the potential activation

of early maladaptive schemas could affect the understanding of the dogs' needs and, consequently, the effectiveness of human interventions.

It is worth noting that such behaviour may escalate toward animal hoarding (see Sacchettino et al. 2023).

Secondly, animals are frequently transported in groups, often with 30-40 individuals crammed into vans, traversing extensive distances with multiple intermediate stops. Consequently, the animal awaiting may endure extended periods confined within the van's cage. Such transportation methods often fail to comply with legal standards and lack suitable vehicles for those specific transports. Moreover, animals require more documentation and veterinary assessments. Concerns also extend to the age of transported puppies, often deemed too young for such journeys, indicative of premature separation from maternal and sibling care. Those early separations from maternal care anticipate behavioural problems like "destructiveness, excessive barking, fearfulness on walks, reactivity to noises, toy possessiveness, food possessiveness, and attention-seeking" (Pierantoni et al. 2011).

Third, a further contention is the suitability of these animals for adoption in environments starkly divergent from their origin. Animals accustomed to rural or low urbanisation settings are transplanted to urban environments, necessitating adaptation to environmental and social stimuli beyond their capacity. Similarly, concerns arise regarding the compatibility of adopted individuals with their adoptive families, particularly in the case of adult animals with established identities and needs. "Transport" adoptions frequently circumvent established adoption protocols, exacerbating the risk of dysfunctional relationships and subsequent rehoming or shelter placement. About 30-40% of northern Italy shelter entrants originate from Southern regions (Arena 2022). Most of them are dogs from southern Italy who

have been adopted from a north Italian family yet have failed to adapt to their new environment.



On the left, dogs are afraid after being removed from their free-ranging lifestyle (Photo: *Volontari del canile di Barletta*). At the centre, a van is transporting dogs from southern to northern Italy. On the right, a van arrived, with people waiting to retrieve "their" dogs (top), and (bottom, in the red circle) a dog in a state of confusion is taken from his adopter (*MilanoBellaDaDio*, min. 3.57-7.40).

The Italian-based *Stray Dogs* association aims to "analyse, both on a theoretical and practical level, the different aspects linked to the coexistence between species in freedom, to mediate and create the conditions for peaceful coexistence." (*Associazione Stray Dogs APS*). It conducts research structured through sequential steps and methodologically sound questionnaires. Their study seeks to methodically probe the multifaceted challenges associated with phenomena such as removing the animals from their home environment and transporting them over long distances to their new homes. By systematically gathering data, the study endeavours to foster an evidence-based understanding of the transport phenomenon, thereby enabling the implementation of best practices across all stages,

from territorial retrieval to post-adoption support. Their initial study elicited responses from 3,463 Northern Italian adopters. The findings reveal several key trends in the adoption process of dogs from Southern regions to Northern areas. The majority of adoptions, approximately 80%, were facilitated through online platforms, indicating a prevalent reliance on digital channels for adoption procedures. A significant portion of the transported animals, 30%, originated from Southern shelters, while 25% were stray dogs directly retrieved from Southern territories. Sicily, Campania, Puglia, and Calabria emerged as the primary regions of origin for the transported animals. Notably, nearly 60% of the animals were puppies, suggesting a preference for younger animals among adopters. However, the transportation process posed challenges, with over half of the animals transported via vans, of which approximately 45% were transported in vehicles deemed unsuitable for live animal transport. Delivery logistics also presented hurdles, with around 60% of deliveries occurring at highway service stations or industrial area parking lots and approximately 70% of transfers transpiring swiftly, with minimal communication afforded to adopters. Financial dealings were ordinary, with approximately 60% of adoptions involving monetary transactions. However, post-adoption support needs improvement, as nearly 40% of adopters reported receiving insufficient assistance. Behavioural issues were prevalent, with almost 45% of animals exhibiting difficulties adapting during the initial adoption phase and around 40% manifesting long-term behavioural problems. Approximately half of the adopters sought professional assistance, underscoring the need for specialised support in addressing these challenges. Additionally, many adopters expressed reluctance to repeat a similar adoption experience, suggesting room for improvement in the adoption process and post-adoption support services (Arena 2022).

In a second study, the Stray Dogs Association launched a follow-up questionnaire to elicit detailed insights into short and long-term adaptation challenges faced by animals from Southern to Northern Italy. They solicit input from canine professionals, including trainers and veterinary behaviourists, to garner expert perspectives on the behavioural issues in these dogs. Additionally,

> […] consultations with Northern shelters regarding the admission of animals from the South and strategies for managing post-adoption challenges are forthcoming. Through these multifaceted research endeavours, the Stray Dogs Association scrutinises the transport phenomenon not for vilification but to elucidate critical shortcomings and foster improvements. Central to this objective is disseminating empirically grounded data that inform competent authorities and advocate for enhanced animal welfare safeguards (Arena 2022).

In line with this case, I interviewed Alessandra from Northern Italy, who adopted a dog from the South. She was not among the respondents to the questionnaire mentioned above. However, she went through the funnel described above and offered a glimpse into relevant details.

Alessandra was already following some organisations with the intent of adopting a dog. The primary motivation was to provide a companion to her other dog. She reported a previous attempt to adopt an injured dog from Albania - another location from where dogs are shipped to and through Italy, moved by "a sense of guilt". Thus, she learned about the dog she adopted from southern Italy through an Instagram post in a video of a man rescuing a young puppy (about three months old) near a high road. The puppy seemed healthy, yet

very scared. Alessandra immediately contacted the organisation to ask for information on the dog. Through a process of continuous communication, the dog was adopted. The whole process, from the initial contact to the dog getting to his new destination, took about 15 days. Alessandra reported scrupulous checks from the organisation on the suitability of the adopters and the place where the dog would live.

The dog travelled by van. In this case, the travelling time was limited to a few hours, with the van leaving on a Thursday afternoon and getting to the pit-stop destination on Friday at 4 am. The van had made a first stop near Rome and was going to make the final stop after, in the region of Lombardia, in the early morning of Friday. It is worth noting that this was an official transportation, with the van being registered for animal transfers. Alessandra and her partner drove by car from Trieste (45.6495° N, 13.7768° E) to Bologna (44.4949° N, 11.3426° E). They went for about 320 Km (199 Mi). The meeting occurred at 4 am, just at the exit of the highway A1 Milano-Napoli, in a large parking lot near a car wash. Streetlamps sufficiently lightened the place. About 8-9 cars were at the appointment, waiting for the van to arrive.

> Most people waiting for the van were couples, and some were single. In some of the cars, there were other dogs. As the organisation instructed us, we waited from a distance when the van arrived. All the adopters approached the van one by one. The man then asked for the person's and dog's names. He verified the match, brought the dog from the crate in his hands, and passed it down to the adopters. [...] The van transported approximately twenty animals, including dogs and several cats. Dogs were funnelled from different organisations to the van. Each animal was in an individual crate. Crates were of different dimensions, with

> larger animals at the bottom and smaller animals at the top. Our dog was scared and confused, and he had a very strong smell. He was not wet, yet the smell was primarily that of pea. Probably, it was also the smell of fear for such a trip. I was told he had a harness on him at the time of departure, yet he had no harness when I met him, for he chewed and destroyed it during the trip. […] He was ok in the car with us that night, but still, nowadays, he gets sick in the car; he starts foaming and sometimes vomits just by noting we are going to put him in the car. [...] They asked for just 50 Euros as reimbursement for the journey. The organisation covered all the vaccinations and initial veterinary care given to the dog. The dog got to us already microchipped and regularly registered in our name (Alessandra, 25 March 2024, *Personal Communication*).

Case 2: Canada and free-ranging dogs from the reserves

MacDonald, Nickerson and Baxter (2024) surveyed North American caregivers who had adopted free-ranging dogs from various living situations. They found many behavioural issues among the dogs, with a notable percentage exhibiting resource guarding, aggression toward humans and other dogs, separation anxiety, and signs of fear and anxiety. The onset of these behaviours occurred early on, with over half of the respondents observing problems within the first three months.

The initial challenges encountered during the adaptation process resonate with similar cases, including those observed in Italy, underscoring the profound complications associated with removing

and relocating dogs to unfamiliar surroundings. In an interview, Karen Baxter — one of the researchers, referred[4]:

> In Canada, indigenous communities are called reserves. In these communities, there are often dogs roaming freely. Most have human guardians, and some do not. The challenge is identifying which ones have a human caregiver vs truly free-ranging. Free-roaming dogs are a cultural preference on the reserves. The estimation is that only a small percentage of dogs are free-roaming without a human guardian. The remaining free-roaming dogs have a "home base" with a human guardian responsible for their well-being. [...] There are many rescues/humane societies that will pick up free-roaming dogs in an attempt to "save" them. This includes the Humane Societies, the Society for the Prevention of Cruelty to Animals, and small local, privately run rescues. [...] Most dogs will be transported to a local shelter or foster home. They will be given vet care and spayed/neutered. Once a home is found, they are adopted out to the new guardian. [...]
>
> The biggest challenge is the resistance to confinement displayed by expressions of stress when isolated or left alone (separation anxiety), including but not limited to vocalisation, destructive behaviour, attempts to escape, getting nervous around new people, sometimes resulting in displays of aggression, and resource guarding both against people and other dogs. [...] I believe a major consideration

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[4] Note: the expressions "free-roaming" and "free-ranging" are equivalent. Baxter uses "free-roaming".

> is the philosophies of the humans in these situations. First, many reserves do not want the dogs removed in the first place. Working with community leaders to establish what is wanted/needed would be a more collaborative solution. Secondly, pet guardians often treat these dogs like dogs born into a confined pet life. Expectations and pressures placed on these dogs are seldom realistic, and time to acclimate to their new captive life is rarely acknowledged or given. People who adopt these dogs need adequate education on how to behave with these types of dogs so the transition can be made easier on the dog and potential bite risks reduced (Karen Baxter, 22 March 2024, *Personal Communication*).

A complementary source is an article by Roberta Bell and Sam Martin in *Rez Dogs - A Central Alberta First Nation's effort to preserve and protect its free-roaming dog population*, where they interview Littlechild, a representative of the First Nations community of Maskwacis.

> Just as First Nations people had nomadic tendencies prior to the arrival of Europeans, their dogs did as well. The dogs helped the people, carrying loads, alerting them of predators in the dark, and offering companionship to their children. In return, people fed the dogs. "It really goes to the beginning of time," Littlechild said. "Our relations began as a partnership." But when First Nations people entered into treaties with the Crown and began living on reserves, that lifestyle slowly eroded. The *neyaskweyah atimwak* - which is a literal translation from Cree describing the dogs of Ermineskin Cree Nation lands - "are only now

> catching up," he said. Allowing dogs to roam free is an important part of Ermineskin's culture that Littlechild wants to maintain. "I think it's super healthy for these dogs," he said. "Our dogs are very lean because they're in very good shape. "You think about the city, the dogs that are locked in a garage or an apartment or a kennel for eight hours a day while mom and dad are at work, versus someone who works at the band office from the townsite, and their dogs are socialising with other dogs, running, going to the pond to cool off, exploring and then coming home that evening (Bell & Martin 2019).

Viable solutions

Solutions to address the complex challenges surrounding the removal, transportation, and relocation of dogs entail multifaceted approaches aimed at safeguarding canine well-being.

Supporting Community Dogs

Firstly, prioritising the maintenance and support of dogs within their natural environments emerges as a fundamental approach, emphasising the importance of preserving the integrity of dogs and minimising disruptions to canine lifestyle and habitats. This is viable for healthy dogs who are well integrated into their natural environment and the humans surrounding them. That does not exclude the possibility for the local authorities to remove these dogs for medical checks and vaccination momentarily and then release them back into their natural environment. There are no reasons to permanently remove those dogs who play a relevant role in the community, offering guardianship, participation in local events and celebrations, companionship, and emotional support. Those facets may

not be necessarily visible. For that reason, assessing the status of a dog within an environment or human community requires due diligence.

Community dogs foster a sense of social cohesion and strengthen the bonds among community members. These dogs serve as common interaction points, bringing individuals together in shared experiences of caring for and interacting with them. Community dogs provide opportunities for socialising and collaboration. Community members often come together to address the needs of these dogs, organising feeding and veterinary care. These shared activities create a sense of unity and belonging among residents, surpassing social barriers and fostering a collective identity. Moreover, interactions with community dogs facilitate communication and connection among people who might not otherwise interact, breaking down barriers and building trust within the community.

Further, interacting with community dogs provides valuable educational opportunities for children and adults. Residents can learn about dog behaviour, responsible (and shared!) companionship, and the importance of compassion and empathy towards animals.

In some communities, dogs hold cultural significance and are deeply embedded in local traditions and customs. They may play ceremonial roles in religious or cultural events, symbolising loyalty, protection, or other shared values.

Thus, community dogs play a vital role in the dog-human community they inhabit, strengthening the fabric of social relationships within neighbourhoods and enhancing the overall well-being of community members. Removing them generates disruption and trauma for both dogs and humans.




The image on the left: Nerone, a community dog, participates in a local parade in Atri, Italy. Photo: Gabriella Patruno. The image on the right: Arnold (front), Lisa (left) and Baobab (right), community dogs in Bali, Indonesia, 2015. Photo: Marco Adda /AEDC Archive.

Assisting Removed Dogs

Providing behavioural and emotional support to dogs who have already been deported can help mitigate the adverse effects of relocation. Furthermore, sustaining shelters is crucial, as well as ensuring that these facilities have adequate infrastructure and funding, as well as understanding and competence to meet the diverse needs of canines. Advocating to establish and expand animal sanctuaries offers another promising avenue, providing safe havens where dogs can live freely and receive the care and attention they deserve. By implementing these solutions, stakeholders can work towards creating a more compassionate and sustainable framework.

For example, *AEDC Anthrozoology Education Dogs Canines* and *Unified K9 Behaviour Centre* have implemented targeted programs to aid free-ranging dogs who have been funnelled into the

removal/adoption process. It is relevant to note that their initiatives do not aim at removing dogs from their natural habitats. Instead, these programs aim to assist these dogs in transitioning to a new environment after being relocated. Such assistance becomes crucial both for dogs – who exhibit significant discomfort in the new environment, and the adopters who encounter unexpected challenges in caring for them.

Multidisciplinary Views on Canines, Space and Agency

The intersection of canine welfare, spatial distribution dynamics, space matters, animal geographies, spatiality in theatre and performance, Anthropocene studies, and animality in somatic practices may offer a rich avenue for multidisciplinary exploration.

Anthropocene studies provide a critical framework for understanding the broader ecological implications of human interventions in animals' spatial dynamics. Scholars such as Haraway (2016) emphasise the entangled relationships between humans, other animals, and the environment. It is urgent to reconsider conventional notions of space and belonging in the age of the Anthropocene.

The stage becomes a site for embodied narratives and spatial negotiations in theatre. Spatial arrangements within theatrical performances reflect broader societal dynamics and power structures. From this perspective, the spatial confinement of dogs within homes or shelters mirrors the power dynamics at play and interrogates notions of agency and control. The work of renowned theatre reformers such as Konstantin Stanislavsky and Peter Brook and recent views on space (Pitches 2020; Romagnoli 2023) can help elaborate the connections between theatre, space and animal agency. Theories and practices such as *Eco-Theatre*, neologisms such as *Anthropo-Scenes* (Chaudhuri 2015), Zooësis (Chaudhuri 2016), and new research fields such as Performance Philosophy (Cull 2018) offer some further input.

David Abram's work on the relationship between humans and the natural world can contribute to discussing the correlation between the spatial dimensions of dogs and their well-being. In his book "The Spell of the Sensuous" (1996), Abram argues that our sensory experiences are intertwined with the landscapes and environments we inhabit. He suggests developing a more embodied, ecological approach to create a more sustainable and equitable future. Hence, those ideas can also be relevant to canine welfare, as dogs are susceptible to environmental changes and rely on their senses to navigate the world around them. By considering the sensory dimensions of canine experiences and their relationship to the landscapes they inhabit, we can better understand their well-being and the impact of spatial interventions on their lives. I urge an embodied, eco-somatic, and ecological approach to canine welfare.[5]

Further, in "The Primacy of Movement" (1999), Sheets-Johnstone delves into the fundamental significance of movement in human experience and consciousness. She explores movement as a primary mode of expression, perception, and meaning-making for humans. Those ideas can be extended (indeed, they should!) into the embodied experiences of dogs and how their movements reflect their emotional states, intentions, and interactions with their environment. By considering the primacy of movement in canine behaviour, we could better understand how dogs navigate and engage with the spaces they

[5] While biologists, ecologists, and other experts understand the ecological implications for the well-being of all species, such an understanding does not necessarily extend to the broader community. Many people may need to be made aware of spatial dynamics' impact on dogs' well-being and the complex relationships between humans, animals, and the environment. This lack of awareness can lead to attitudes and behaviours that are harmful to dogs, such as removing them from their natural habitats at any cost and confining them to deficient shelters and inadequate adopters.

inhabit, both physically and socially, and further bridge animal behaviour studies and discussions on spatiality, anthropology, and the human-animal relationship. Situating dogs within broader anthropological frameworks can illuminate the multifaceted dimensions of spatiality in canine lives and challenge conventional boundaries between human and animal spaces. Moreover, animality in somatic practices offers insights into the embodied experiences of animals and how spatiality shapes their lived realities. Somatic practices can provide insight into how dogs navigate and perceive space, shedding light on the sensory dimensions of their confinement and its impact on their well-being. Canine Anthropology and *Canine Participated Somatic Experiencing* (Adda 2023) are attempts in that direction.

By integrating diverse perspectives, we can construct a nuanced understanding of the spatial dimensions of canine welfare, recognising dogs not merely as passive objects within spatial configurations but as active agents whose experiences are intricately intertwined with - and therefore shape, the landscapes they inhabit. This holistic and *zoosomatic* (Adda 2024b) approach invites us to reconsider the ethics of spatial interventions in the lives of dogs and prompts us to cultivate more compassionate and ecologically sustainable modes of coexistence.

Challenges and Limitations

The inherent difficulties in gathering accurate information on the transfer of free-ranging dogs to unfamiliar environments are manifold. These transfers are often conducted covertly or informally and facilitated by individuals using private vehicles and unmonitored routes. As a result, a census of these movements is exceedingly tricky. The undercover nature of the process makes it difficult to track the dogs being relocated and their ultimate destinations. Also, these

transfers span a broad spectrum, with some involving movements across different regions, countries or even continents. Thus, capturing comprehensive data on these widespread and decentralised operations presents additional challenges.

Nevertheless, despite the overarching complexity, there is potential to zoom into specific cases to gain a more nuanced understanding of the broader dynamics at play. Focusing on localised contexts may illuminate these movements' patterns, motivations, and consequences. This targeted approach allows for a more granular analysis of the factors and implications.

Conclusions

In the name of animal welfare, healthy and well-integrated village dogs are often kidnapped, neutered, vaccinated, chipped, and sent somewhere like a postal parcel. In other words, they are deported, torn from their natural life, territory, family or group, from their freedom, and relegated to a city apartment, held in home captivity. Such a phenomenon occurs globally. Although "free-ranging" and "ranging free" may sound like synonyms, distinguishing between them may become necessary. What does "free" represent in our eyes? Abandoned? Dangerous? Independent? Do ranging free dogs need to be saved? How can we foster a multidisciplinary approach to comprehend the issue in more nuances, broaden our views, and propose new perspectives and solutions instead of perpetuating old and sometimes dysfunctional narratives? What other narratives can we embrace?

The discussion surrounding the welfare implications of removing healthy free-ranging dogs from the streets and relocating them to unfamiliar environments raises questions about fairness and alternative approaches to managing dog populations. It is essential to consider the perspectives of all stakeholders, including the dogs

themselves. Forcibly removing dogs from their familiar territories and uprooting them to unfamiliar environments can be framed as a violation of their autonomy and rights. That may reflect anthropocentrism, Anthrozooalgia, and other forms of human exceptionalism and distress. While short-term solutions may reduce public health risks or mitigate conflicts between free-ranging dogs and humans, the long-term emotional toll on the animals cannot be ignored. Specific cases can help in understanding broader issues.

The question arises as to whether some alternative narratives and approaches can achieve the same objectives while minimising harm to the dogs. One alternative narrative focuses on community-based solutions prioritising coexistence and collaboration between humans and dogs. Rather than viewing free-ranging dogs as nuisances to be eradicated or poor creatures to be saved, this approach recognises their intrinsic value as sentient beings and social participants in the community. Hence, community-driven initiatives can help stabilise free-ranging dog populations and empower local communities to take responsibility for the dogs. The welfare and well-being of dogs require a holistic approach that considers their emotional balance, respects their autonomy, engages local communities as partners in finding compassionate and practical solutions, and creates safer and more inclusive dog-human communities.

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Noi frontiere ale comunicării dintre oameni și animale

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Abstract

The connection between humans and animals occurs on many levels and through different information transfer channels, some already known, such as body language. With today's technology, other forms of communication are being explored, such as language, brain-to-brain synchronisation, and wireless communication via chips. Some novel topics can provide important insights into other comm unication channels such as ancient legends of wilderness saints communicating with animals, wild children raised by animals are interesting examples of human-animal interactions, and the behaviour of octopuses, dolphins, whales, or corvids. Is articulate language an evolutionary necessity or just a side effect? Could the latest findings on interbrain synchronisation and artificial intelligence be the future of human-animal interaction?

Keywords

brain-to-brain synchronisation, human-animal communication, communication channels

Spectrul invizibil al limbajului

Comunicarea este un cuvânt folosit pentru diferite modalități prin care se realizează transferul de informații. Pentru oameni, acest cuvânt reprezintă, în primul rând, limbajul utilizat pentru a transmite o informație dorită. Atunci când vorbim despre limbaj ne gândim adeseori la limba maternă. Emiterea unor vocale și consoane nu înseamnă în mod necesar transmiterea completă de informații. Adeseori aceste sunete sunt menite să ascundă o mare parte din

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informații. Suntem conștienți de acest aspect pentru că știm că există un limbaj al corpului și chiar microexpresii ale feței ce pot transmite, în unele cazuri, mai mult decât tindem să credem. Limbajul este în consecință o formă de comunicare limitată dacă nu este însoțită și de alte forme de comunicare.

Când facem referire la comunicarea reală dintre oameni și animale ne putem gândi la povestea din Biblie despre Adam și Eva din Grădina Edenului. În acel ecosistem animalele se înțelegeau între ele și toate comunicau cu Adam care le dădea și nume. Pe lângă povestirile din Biblie, există și alte mărturii din secole mai apropiate de noi, cum ar fi comunicarea dintre sfinți și animale sau dintre marii maeștri spirituali și anumite animale.

De-a lungul istoriei, există numeroase relatări care evidențiază afecțiunea și grijile sfinților față de întreaga creație divină, cuprinzând atât ființele umane, cât și lumea animală și mediul înconjurător. Într-o notă de compasiune și respect, unii dintre sfinți s-au dedicat îngrijirii animalelor bolnave, stabilind legături de afecțiune și recunoștință între ei și creaturile pe care le-au îngrijit. Aceste acțiuni sunt consemnate în diverse surse istorice și hagiografice, reflectând respectul sfinților față de toate manifestările vieții. În plus, sfinții au fost adesea apărători ai culturilor agricole și livezilor, luptând împotriva diverselor invazii de insecte și protejând bunurile oamenilor. Astfel de exemple de implicare activă în conservarea resurselor naturale sunt adesea menționate în scrierile tradiționale și în istoriile locale, ilustrând sensibilitatea spirituală a sfinților față de mediul înconjurător. În unele cazuri, sfinții au atins un nivel de puritate spirituală atât de înalt încât au fost în armonie cu creaturile sălbatice, care i-au servit ca niște ucenici dăruiți. Aceste relatări sugerează o comuniune profundă între sfinți și lumea naturală, subliniind legăturile subtile dintre dimensiunea umană și cea naturală a existenței.

Cel mai cunoscut exemplu din literatura patristică este cel al Sfântului Serafim de Sarov, care comunica cu toate animalele și chiar avea un urs care îl ajuta în munca sa. Prietenia lui Serafim cu animalele din pădure era o sursă continuă de uimire pentru prietenii săi călugări. Potrivit unuia dintre tovarășii săi călugări, Părintele Iosif, martor ocular, iepuri, vulpi, lincși, șopârle, urși, chiar și lupi se adunau la intrarea în mica sa colibă, așteptând ca Sfântul Serafim să-și termine rugăciunile și să iasă pentru a-i hrăni cu o coajă de pâine pe care părea să le-o fi lăsat mereu deoparte.

Mai multe persoane au povestit despre un urs care se supunea întotdeauna rugăminților sale și făcea comisioane pentru el, cum ar fi să găsească miere atunci când avea un vizitator. Aceste gesturi ale ursului îl încântau întotdeauna pe sfânt (Stefanatos 1992, 180-181). Un exemplu din tradiția romano-catolică este cel al Sfântului Francisc de Assisi care s-a eliberat public, în piața publică, de bogății și confort pentru a îmbrățișa o viață ascetică dominată de iubirea față de divinitate și față de întreaga creație. A părăsit Assisi și s-a îndreptat spre Gubbio, unde a îmblânzit un lup feroce pur și simplu vorbindu-i, acesta fiind primul său miracol (Le Goff 2000). Exemplele sunt numeroase și analiza poate deveni mai amplă.

În contextul persecuțiilor religioase, există relatări impresionante despre modul în care sfinții au fost protejați de pericolele provocate de fiarele sălbatice sau de persecutorii lor. Astfel de evenimente, consemnate în sinaxare și martiricoane, oferă mărturii ale credinței și protecției divine acordate credincioșilor în timpul încercărilor și persecuțiilor. Unul dintre exemplele cele mai cunoscute din Vechiul Testament este povestea Profetului Daniel, care a fost aruncat în groapa cu lei, dar a fost păzit și protejat de Dumnezeu. Acest episod emblematic subliniază credința neclintită a sfinților și intervenția divină în momentele de nevoie și pericol. Aceste relatări, înregistrate în diverse surse istorice și religioase, reprezintă o mărturie a

profunzimii spiritualității umane și a legăturii strânse dintre credință, compasiune și protecția divină. Ele rămân o sursă de inspirație și reflecție pentru credincioși și cercetători deopotrivă, ilustrând puterea credinței și a devotamentului în fața adversităților și a pericolelor lumii. Diverse texte ne oferă și „tehnologia” necesară de a relaționa cu animalele: „tot războiul să ne fie împotriva patimilor celor dinăuntru. Căci de le vom scoate pe acestea din inimă cu darul și cu ajutorul lui Dumnezeu, nu numai cu oamenii, dar și cu fiarele sălbatice vom petrece cu ușurință, cum zice și fericitul Iov: «Fiarele sălbatice vor fi cu tine în pace» (V, 23). Deci mai întâi trebuie să luptăm împotriva duhului întristării, care împinge sufletul la deznădejde, ca să-l alungăm din inima noastră” (Stăniloae, E-Book, Loc 1881).

Comunicarea cu animalele este regăsită în toate culturile și civilizațiile lumii. Animalele dețin o importanță spirituală deosebită în cultura indiană. Dovezile provenite din cea mai veche civilizație indiană cunoscută indică faptul că animalele aveau o semnificație religioasă. Excavațiile au scos la iveală imagini reprezentând tauri, unicorni, elefanți și tigri pe sigilii de lut (Munsterberg 1970; Zimmer și Campbell 1999). De asemenea, multe dintre imnurile vedice au titluri inspirate din lumea animală, precum „Broaștele”, „Vacile” și „Vitele”. Imnul „Broaștele” prezintă orăcăitul broaștelor ca fiind echivalent cu cântecul religios al preoților; ambele erau considerate esențiale pentru atragerea ploii în timpul corespunzător al anului, iar ploaia era percepută ca fiind vitală pentru toate ființele vii (Maurer 208). De exemplu, în India animalele sunt considerate a fi înzestrate cu ceva divin (Sister Nivedita 1914). Literatura indiană îndeamnă hindușii să iubească natura și sălbăticia. În epopeea Mahabharata, compusă între anii 400 î.Hr. și 400 d.Hr., viața animală și natura sălbatică sunt prezente într-un mod vibrant. Povestea descrie lacuri unde elefanții se scăldau și stoluri de lebede și gâște roșii sălbatice se odihneau; deșerturile, munții și pădurile adânci constituie fundalul acestei epopei

captivante care zugrăvește bogăția, diversitatea și frumusețea animalelor care trăiesc în pădurile Indiei. Textele sacre hinduse, numite Shastra, oferă un exemplu de moralitate în relația om-animal și astfel de relatări pot fi întâlnite în scrieri mai mult sau mai puțin cunoscute în Occident: Mahabharata, Ramayana, Bhagavad Gita, Upanishadele, Puranele, Pancatantra. Tradiția hindusă are multe dimensiuni care ne-ar putea ajuta să ne vindecăm lumea și relațiile cu alte creaturi. Cele mai vechi rădăcini ale religiei indiene dezvăluie natura ca fiind sacră. Viziunile spirituale ale transmigrației, karmei, unității și nonviolenței le reamintesc hindușilor că nu sunt separați de lumea din jurul lor, ci sunt legați spiritual de toate ființele vii și că toate creaturile împărtășesc interese similare. Literatura sacră indiană oferă o multitudine de personaje animale calde și pline de personalitate, vibrante și fascinante, de la maimuțe și urși la șerpi și câini.

Comunicarea cu animalele a fost puțin explorată, cele mai multe forme de comunicare fiind cele în care animalele sunt dresate, dar în acest caz este vorba de a învăța animalele să răspundă la anumiți stimuli, o metodă înrudită cu celebrul reflex condiționat a lui Pavlov.

Modul în care natura și animalele comunică între ele este total necunoscut pentru noi. Acolo unde credem că nu există nici un sunet, acel spațiu este de fapt plin de sunete imperceptibile pentru noi. Cum a evoluat această comunicare prin intermediul cântecelor și a altor vociferări armonioase la păsări, e greu de analizat, dar o idee aproape metaforică, exprimată de David George Haskell, poate explica în parte cântecul păsărilor: acele trunchiuri rezistente și crengile flexibile ale coniferelor de munte produc un zgomot de vânt unic în aceste păduri, un sunet care probabil a modelat cântecul croscarilor. De la vânt, la copaci, la cântecul păsărilor ("How David George Haskell Decodes the Sounds of Our Natural World" 2022). În Australia, Jacqueline Giles, de la Universitatea Murdoch, a petrecut 230 de zile pe teren și a realizat peste 500 de ore de înregistrări pentru a demonstra că o specie „mută"

de broască țestoasă de apă dulce cu gât lung, cunoscută sub numele de *Chelodina oblonga*, are de fapt un repertoriu acustic larg (ABC News 2023; Giles et al.2009).

Animalele au capacitatea de a utiliza forme variate de comunicare pe care oamenii e posibil să le fi pierdut în favoarea limbajului articulat. Știm că animalele, la fel ca oamenii, pot identifica sunete specifice într-o aglomerație de zgomote de fond, cum ar fi vocea puiului sau cea a partenerului. De exemplu, la o petrecere aglomerată sau într-un restaurant zgomotos, cei mai mulți dintre noi fac ceva remarcabil. Dintre toate sunetele și vocile din jurul nostru, în momentul în care ne auzim propriul nume, putem să identificăm sursa respectivă și chiar să fim atenți la un anumit vorbitor dintr-un grup și să le ignorăm pe celelalte. În 1953, omul de știință britanic Colin Cherry a numit acest fenomen „cocktail party problem" (Haykin și Chen 2005).

Problema nu este identificarea unui sunet familiar ci distincția pe care trebuie să o facem atunci când încercăm să identificăm sunetele de care avem nevoie (sunete care nu ne sunt familiare) și să le diferențiem dintre alte sute sau chiar mii de alte sunete.

Tehnologia recentă ne poate ajuta cu ajutorul unor programe complexe instalate pe computere puternice, să realizăm o filtrare a acestor sunete (Bermant 2021; "Solving the Cocktail-Party Problem - Earth Species Project," n.d.). Un astfel de program este *BEANS: The Benchmark of Animal Sounds*. Acesta este un program de ascultare și interpretare a semnalelor acustice. Criteriul de referință constă în două sarcini comune în bioacustică: clasificarea și detectarea. Acesta include 12 seturi de date care acoperă diverse specii, inclusiv păsări, mamifere terestre și marine, anurieni și insecte (Hagiwara et al.2022). O altă descoperire recentă a arătat că multe sunete importante în comunicarea dintre animale sunt sesizate doar ca diverse zgomote lipsite de semnificație pentru urechea umană. Un studiu realizat în 2022, a arătat că porcii vocalizează, de obicei, apeluri de înaltă frecvență, cum ar fi

țipetele sau scâncetele, în situații negative, în timp ce apelurile de joasă frecvență, cum ar fi lătratul și grohăitul, apar atunci când porcii experimentează atât emoții pozitive, cât și negative (Briefer et al. 2022). „Prin antrenarea unui algoritm de recunoaștere a acestor sunete, putem clasifica 92% dintre apeluri în funcție de emoția corectă" (Yang 2022). Cu ajutorul calculatoarelor și a inteligenței artificiale se construiesc programe de filtrare a sunetelor care aparțin limbajului animal care ajută cercetătorii să identifice sunete specifice unui anumit limbaj. De exemplu, CETI este un proiect de ascultare care utilizează metode avansate de învățare automatizată și robotică pentru a înțelege ceea ce spun cașaloții. Prima fază constă în construirea unui set de date acustice și comportamentale la scară largă, unic în felul său, pentru a antrena tehnologia CETI să observe comunicarea balenelor în context și să traducă limbajul balenelor („PROJECT CETI"; TED 2021).

Deși mediile sunt foarte diferite, creierul uman și creierul de orcă (*Orcinus orca*, numită și balena ucigașă, ea fiind cea mai mare specie de delfin) prezintă același tip de arhitectură. Creierul de orcă are un lob paralimbic care face legătura între sentimente, emoții și gânduri iar din acest punct de vedere, comunicarea emoțională la aceste mamifere este mult mai complexă decât la oameni, ele reușind să comunice mult mai bine prin intermediul emoțiilor decât oamenii. Procesarea sunetului la balene are loc în aceeași zonă corticală ca și în creierul uman. Totuși, această procesare are loc la un nivel mult mai complex decât procesarea realizată în creierul uman. Este foarte posibil ca toate mamiferele marine să aibă un astfel de sistem acustic atât de complex (DW Documentary 2021). Începutul cercetărilor în domeniul comunicării cu animalele a avut loc în anii 1960, în largul coastelor Argentinei odată cu descoperirile cercetătoarei Katy Payne. Împreună cu soțul ei de la acea vreme, Roger Payne, un biolog cercetător al balenelor, Katy a descoperit că balenele cu cocoașă nu numai că folosesc un limbaj de comunicare între ele prin diferite tonuri și

strigăte, ci și „compun” muzică pentru a comunica. Ea a descoperit că melodiile lor se schimbau constant, iar sunetele „pieselor muzicale” erau foarte sofisticate („Katy Payne,” n.d.). Urechea muzicală a cercetătoarei era deja antrenată pentru că ea știa să cânte la câteva instrumente muzicale și chiar absolvise și o școală de muzică. Pentru altcineva, neantrenat în muzică, nu ar fi fost poate atât de evident. Balenele comunică și printr-un fel de fluierat, cu sunete complexe. Nivelul social și complexitatea fluieratului sunt corelate, sugerând că sunetele tonale complexe joacă un rol important în comunicarea socială (May-Collado, Agnarsson, și Wartzok 2007).

Kathy a devenit un biolog acustic, adică un cercetător care studiază sunetele emise de ființele vii. Acest lucru a ajutat-o mai târziu, să descopere sunete inedite atunci când lucra cu elefanții de la grădina zoologică, la un proiect de ascultare a elefanților de la Universitatea Cornell în anii ‘80. Toată lumea cunoaște sunetul de trompetă emis de elefanți, însă cercetătoarea a simțit și altceva: un fel de pulsație în aer. Acest lucru a dus la descoperirea faptului că oamenii nu pot auzi multe dintre sunetele pe care le fac elefanții. Payne și alți cercetători folosesc acum echipamente speciale pentru a analiza aceste sunete. (“What’s an Acoustic Biologist? | Noisy Planet” 2016).

Copii crescuți de animale sălbatice

Știm cu toții poveștile în care copii precum Mowgli sau Tarzan au fost crescuți de animale sălbatice în junglă, iar Remus și Romulus au fost hrăniți cu lapte de lupi sălbatici. Aceste legende se pare că au un sâmbure de adevăr pentru că au fost documentate și cazuri reale, am putea spune chiar tragice, a unor copii care au fost crescuți de animale. Mai convingător este cazul lui John Ssebunya, un copil care a fost martor la uciderea mamei sale de către tatăl său la vârsta de doi sau trei ani. După acest eveniment traumatizant copilul a fugit în jungla din Uganda (Kunal Dutta 2012). Acolo a învățat să comunice foarte

bine cu maimuțele care l-au învățat să caute mâncare și să se cațăre în copaci.

Oxana Malaya este o fetiță care a fost ignorată de părinții alcoolici și a primit confort și contact social de la câinii dintr-o cușcă din spatele casei sale. La vârsta de trei ani, în Kherson (Ucraina), Oxana Malaya a fost lăsată afară, în frig, de către mama și tatăl ei abuzivi.

Într-o încercare disperată de a se încălzi, s-a târât într-o cușcă împreună cu câinele lor de companie Naida - un țarc în care va trăi în următorii cinci ani („I Walked on All Fours & Barked after Being Raised by Dogs from Age of 3" 2022). Malaya a învățat să latre, să mârâie și să se comporte ca un câine în aproape toate privințele. În prezent, Oxana are 30 de ani și locuiește la un azil pentru persoane cu dizabilități, fiind mental mult mai tânără decât vârsta ei reală. Există cazuri de copii din România, Siberia, Chile și din alte țări, crescuți de câini domestici. Există rapoarte despre copii crescuți de urși, oi, vite, capre și chiar de struți în Sahara („Real Cases of Children Raised by Wild Animals," n.d.). Copiii abandonați încearcă să supraviețuiască mediului și, din acest punct de vedere, ei dau dovadă de un grad foarte înalt de adaptabilitate. Sunt capabili să învețe limbajul și comportamentul animalelor pentru a supraviețui în situații extrem de ostile.

Un cercetător științific are nevoie de ajutorul inteligenței artificiale și zeci de ani de studii pentru a înțelege măcar puțin din limbajul animalelor. Și totuși considerăm acești copii ca fiind retardați mintal, uitând că noi am crescut în cu totul alt mediu. Creierul acestor copii a făcut un efort semnificativ pentru a supraviețui. Un astfel de caz este și cel al fetiței pe nume Genie, care a fost înfometată, abandonată și torturată. „Limba și gândirea sunt distincte una de cealaltă. Pentru mulți dintre noi, gândurile noastre sunt codificate verbal. În cazul lui Genie, gândurile ei nu au fost practic niciodată codificate verbal, dar există multe moduri de a gândi", a declarat

Curtiss, unul dintre puținii membri supraviețuitori ai echipei de cercetare. „Ea era inteligentă. Putea folosi un set de imagini astfel încât să spună o poveste. Putea crea tot felul de structuri complexe din bețe. Avea și alte semne de inteligență. Ne face limbajul să fim oameni? Aceasta este o întrebare dificilă.", a mai spus lingvistul. „Este posibil să cunoști foarte puțin limbaj și totuși să fii pe deplin uman, să iubești, să formezi relații și să te implici în lume. Genie s-a implicat cu siguranță în lumea noastră. Putea să deseneze în moduri în care ai fi știut exact ce comunica" (Carroll 2018).

Totuși, nu trebuie să uităm niciodată că organizarea mentală, deși aparent deficitară pe care au reușit să o obțină, a fost suficient de eficientă pentru a le permite să supraviețuiască mulți ani într-un mediu ostil fără psihoză, autism sau alte afecțiuni de lungă durată. Și indiferent cât de „sălbatici" au devenit, ei au răspuns imediat la tratament și și-au recăpătat un fel de umanitate parțială. Mintea umană pare să aibă o rezistență și o reziliență extraordinară. Să nu uităm faptul că nu orice copil are o limbă maternă în sensul bine-cunoscut. De exemplu, copiii surzi din naștere, nu au așa ceva. Ar fi o greșeală să credem că acești copii pot înțelege limbajul așa cum îl înțelegem noi. Limbajul lor matern este comunicarea prin semne. Limba maternă pentru acești copii reprezintă de fapt o a doua limbă. A doua limbă nu se învață ușor pentru că metodele de predare și de învățare sunt diferite. Introducerea celei de-a doua limbi ar trebui să includă imagini, context experiențial și experiență anterioară la un nivel provocator, dar totuși adecvat. Prima limbă a elevilor ar trebui să fie folosită pentru a explica cea de-a doua limbă. Limba a doua trebuie să permită folosirea metalimbajului pentru a ajuta la înțelegere. În cele din urmă, a doua limbă trebuie să fie construită pe baza schemei elevilor legate de prima lor limbă. Știind acestea să ne întoarcem la copiii crescuți de animale sălbatice și să înțelegem cât de greu este pentru ei să învețe limbajul uman după o metodă clasică utilizată la școală (Cayea 2006).

Arhitectura de bază a creierului este construită printr-un proces continuu care începe înainte de naștere și continuă până la vârsta adultă. Întâi se formează conexiuni și abilități neuronale mai simple, urmate de circuite și abilități mai complexe. În primii ani de viață, în fiecare secundă se formează peste 1 milion de noi conexiuni neuronale. După această perioadă de proliferare rapidă, conexiunile sunt reduse printr-un proces numit „pruning”, care permite circuitelor cerebrale să devină mai eficiente (Harvard University 2015).

Prin urmare, creierul copiilor crescuți în sălbăticie se va dezvolta conform priorităților de supraviețuire și va asigura abilitățile necesare supraviețuirii în acele condiții. Aceste abilități s-au dovedit a fi extrem de eficiente în cazul acestor copii așazisi sălbatici.

În prezent, majoritatea psihologilor consideră incapacitatea acestor copii de a stăpâni limbajul ca fiind mai degrabă un mecanism comportamental adaptat în mod specific la mediul și circumstanțele lor decât o incapacitate biologică (Jarman 2019; Nowak și Krakauer 1999).

De unde vine limbajul?

Ce este de fapt acest limbaj articulat al oamenilor? Studiile încearcă să identifice cum a apărut acest limbaj pe scara evoluției, dar va rămâne pentru mult timp un mister ce nu poate fi complet descifrat. Ce a determinat evoluția limbajului la homo sapiens în comparație cu omul de Neanderthal? În ciuda faptului că au secvențe primare identice cu cele ale neanderthalienilor, oamenii moderni au suferit modificări în reglarea genelor FOXP2. Acestea par să determine ca gena FOXP2 să fie exprimată diferit față de cea a neanderthalienilor, iar aceste diferențe de exprimare se regăsesc în modul de organizare a neuronilor cerebrali. Combinând aceste indicii genetice cu diferențele de comportament simbolic și cultural care sunt evidente din arhivele fosilizate, se sugerează că limbajul a apărut în descendența noastră

după despărțirea de strămoșul nostru comun cu neanderthalienii și, probabil, nu mai târziu de 150000 - 200000 de ani în urmă (Pagel 2017).

Lipsa unor asemănări formale evidente între limbajul uman și comunicarea animală i-a determinat pe unii cercetători să propună ipoteza conform căreia limbajul uman nu este un produs al evoluției, ci un efect secundar al unui creier mare și complex, evoluat în scopuri non-lingvistice. Alți cercetători sugerează că limbajul reprezintă un amestec de factori organici și culturali și, ca atare, poate fi înțeles pe deplin doar prin investigarea istoriei sale culturale. Până în prezent nu există încă o explicație satisfăcătoare pentru faptul că doar oamenii au dezvoltat limbajul articulat (Nowak and Krakauer 1999). Studii mai recente au arătat că una dintre cauze ar putea fi simplificarea anatomiei laringelui la oameni, ceea ce le permite să formeze sunete, precum vocalele. În cazul primatelor, comunicarea se realizează preponderent pe baza limbajului corporal. Primatele sunt capabile de a scoate sunete foarte puternice pentru că în jurul laringelui există un mușchi pe care oamenii nu îl au sau l-au pierdut pe scara evoluției (Nishimura et al. 2022). Totuși, am putea crede că perceperea sunetelor și diferențierea lor este o capacitate specifică omului. De exemplu, putem diferenția sunetele „da” de sunetele „ta”. La nivelul laringelui și a gurii diferența este insesizabilă. Așadar, diferența dintre un „ta” și un „da” nu este legată de locul în care sunetele sunt făcute în gură, ci de faptul că în „da”, cutia vocală se activează și începe să bâzâie puțin mai devreme decât în „ta”. Această diferență atât de mică se pare că este sesizată chiar și de bebeluși. Aceasta să fie deosebirea fundamentală dintre oameni și animale? Experimentele destul de dure (prin electrocutare și însetare) făcute pe rozătoare ca chinchila au arătat că și aceste animale sunt capabile să facă o diferențiere subtilă între diferite sunete. Și nu doar ele: șobolanii, maimuțele, șopârlele, șerpii. Practic, toată „lumea” o poate face. Așadar, nu este nici pe departe o abilitate umană specială. Ceea ce diferențiază oamenii de animale este gramatica și scrierea în

propoziții inteligibile („Animals and Human Communication" n.d.). Se pare că pierzând capacitatea de a urla și de a comunica non-verbal, am inventat gramatica și am învățat să scriem. Totuși, odată cu dezvoltarea tehnologiei începem să comunicăm iar prin semne. Acest tip de transmitere a informațiilor este o metodă de comunicare mult mai rapidă. Dacă nu ar fi așa, nimeni nu ar mai folosi iconițele cu emoții de pe telefon.

Interfețele comunicării

Noi știm că limbajul articulat nu este cea mai completă formă de comunicare. Mai știm că, fizic, nu putem comunica la distanțe mari. Tehnologia face pentru noi acest lucru, dar creierul uman pare că poate depăși tehnologia. Fiecare proces psihic se realizează cu efortul întregului creier și transmisiile de informații cu ajutorul impulsurilor electrice neuronale dau naștere la unde electrice cu frecvențe diferite în funcție de starea de veghe, de somn, de activitate intensă sau de relaxare. Aceste frecvențe pot fi înregistrate sub forma unei electroencefalograme, dar se pare că pot fi transformate și în unde radio ce pot fi transmise la distanță. Aceste unde pot fi apoi decodificate și retransformate cu ajutorul unei interfețe (metasurface), conectată la computer, în unde cerebrale ce pot influența activitatea cerebrală a persoanei care recepționează aceste unde. În acel moment persoana receptoare va vizualiza fosfene ce corespund unei anumite litere sau chiar vor fi capabile să identifice litera pe ecranul unui computer. Astfel, dezvoltarea recentă a acestor interfețe face posibilă comunicarea directă de la creier la creier. Datele EEG colectate sunt alcătuite din activitatea ritmică a creierului, care reflectă oscilațiile neuronale care au loc în interiorul acestuia (Zain 2020). Aceste oscilații neuronale sunt determinate de interacțiunile dintre neuroni și apar la frecvențe specifice („The TRUTH about Neuralink & BCI's" n.d.).

În termeni foarte simpli, informația este extrasă din semnalele neuronale ale unui creier emițător, digitalizată și apoi transmisă unui creier receptor. Este important faptul că feedback-ul electric sau comportamental îmbunătățește performanța ambilor subiecți (Ma et al. 2022; Melgarejo, Moioli, and Nardelli 2019; „Breakthrough BCI Enables Brain-To-Brain Communication | Edge Computing Modular AI Chip | Robot Touch" n.d.). Odată cu dezvoltarea calculatoarelor cuantice, care sunt capabile să efectueze calcule extrem de complexe în fracțiuni de secundă, calcule pe care un computer obișnuit le-ar face în zeci de ani, (Titcomb 2023; Morvan et al. 2023), identificarea limbajului animalelor și transmiterea de informații de la creier la creier se va face aproape instantaneu. Vom putea folosi poate această tehnologie (Dick Carrillo Melgarejo, Renan Cipriano Moioli și Pedro 2019) pentru a comunica la distanță nu doar cu oamenii (Tech Planet 2021) ci și cu animalele. O altă metodă de a identifica gândurile oamenilor se bazează pe folosirea scanerului ce detectează o anumită activitate cerebrală într-o anumită arie sau punct de pe cortexul cerebral ce este activat în funcție de gândurile persoanei respective. Scanerul este conectat la un computer ce analizează și transformă în imagine acele activități neuronale. Această tehnică poartă numele de reconstrucție a imaginilor de înaltă rezoluție cu modele de difuzie latentă din activitatea creierului uman. Este o nouă metodă bazată pe un model de difuzie (DM) pentru a reconstrui imagini din activitatea creierului uman obținute prin rezonanță magnetică funcțională (Takagi și Nishimoto 2022).

Creierul are tehnologia proprie

Căutând cu ajutorul tehnologiei diverse metode de comunicare wireless, uităm că noi oamenii deținem cea mai sofisticată tehnologie ce există în univers și anume, creierul uman. Poate că dacă am investi mai mult în cercetarea propriului creier am descoperi mult mai multe

posibilități de comunicare decât ne-am putea imagina vreodată. Organismul uman a generat foarte multe surprize de-a lungul zecilor de ani de cercetări. Fiecare salt al tehnologiei ne-a adus unplus de cunoaștere despre ființa umană. Hiperscanarea electroencefalografică a fost utilizată pentru a investiga modelele de sincronizare intercerebrală între participanți care interacționează prin vorbire. Rezultatele arată că oscilațiile cerebrale sunt sincronizate între ascultător și vorbitor în timpul narațiunilor orale. Aceste rezultate demonstrează existența unei comunicări active de la distanță ce duce la sincronizarea reciprocă a cortexului cerebral. Această sincronizare nu este un epifenomen al procesării auditive. Schimbul de informații verbale nu poate fi înțeles pe deplin fără a analiza această sincronizare. Analiza izolată a activității cerebrale a ascultătorului sau a vorbitorului nu ne furnizează o explicație satisfăcătoare. Sincronizarea nu are legătură cu mișcarea mușchilor maxilari pentru că în timpul vorbirii subiecții nu au mișcat maxilarele simultan, iar unele sincronizări au fost independente de folosirea limbajului (Pérez, Carreiras, and Duñabeitia 2017). Sincronizarea creierelor se petrece și în cazul interacțiunilor sociale, mai specific în regiunea temporal-parietală a cortexului, în domeniul undelor gamma. Privirea și afecțiunea se pare că sunt favorabile sincronizării. Unele tipuri de sincronizare socială trebuie mai profund studiate pentru a observa în ce condiții două persoane necunoscute se pot sincroniza (Kinreich et al. 2017). Un studiu mai recent, publicat în 2022, a arătat că sincronizarea se poate produce chiar dacă persoanele care lucrează împreună nu sunt prezente în același loc. Sincronizarea s-a produs chiar și la jucătorii online ce aveau ca sarcină să direcționeze o mașină în cadrul unui raliu, ei făcând parte din aceeași echipă. Perechile de jucători, care au lucrat împreună, s-au dovedit a avea un cuplaj neuronal ridicat în benzile de frecvență alfa, beta și gamma (Wikström et al. 2022).

Alte cercetări s-au direcționat spre sincronizarea cerebrală dintre mamă și copil pentru a detecta factorii ce determină o bună comunicare. Privirea mamei și cea a copilului joacă un rol foarte important, la fel ca și microexpresiile feței, cum ar fi ridicarea simultană a sprâncenelor. Mișcările motorii sincrone joacă și ele un rol important în dezvoltarea proceselor cognitive ale copilului. Pe scurt, conectivitatea comportamentală și neuronală, precum și mediul comun fac parte din sincronia părinte-copil (Turk et al. 2022). În afara semnalelor vizuale, semnalele chimice joacă la rândul lor un rol important în sincronizarea cerebrală mamă-copil. Bebelușii au prezentat mai multă atenție socială, atitudine pozitivă și siguranță în sensul că au arătat comportamente de apropiere și siguranță atunci când au recepționat semnalele chimice materne cum ar fi mirosul, ceea ce a sporit sincronizarea neuronală. Mamele umane folosesc mecanisme intracerebrale pentru a acorda creierul social al sugarului, iar semnalele chimice pot avea și rolul de a efectua transferul sociabilității copilului de la legătura mamă-copil la viața în cadrul grupurilor sociale (Endevelt-Shapira et al. 2021). Pentru a înțelege mai bine rolul feedback-ului în interacțiunea dintre mamă și copil, cercetătorii au observat ce se întâmplă în timpul efectuării unei activități. Sincronia mamă-copil a fost mai mare atunci când mama reacționa pozitiv. Un alt efect observat a fost faptul că, în timpul efectuării unei sarcini, sincronia copilului era mult mai mare atunci când copilul privea ce face mama decât atunci când mama observa ce face copilul. E posibil ca un copil să dorească instinctiv să învețe totul de la mamă și astfel să folosească capacitatea creierului de a sincroniza la maximum (Atilla et al. 2023). Acest instinct poate sta la baza dezvoltării abilității de a comunica cu animalele în cazurile copiilor abandonați în pădure sau în junglă și crescuți de animale. Sincronizarea creierului copilului cu cel al mamei se petrece foarte repede și la o intensitate mare atunci când există emoții pozitive. Dacă

nu se manifestă aceste emoții (atitudinea mamei este neutră), sincronizarea nu apare (Morgan et al. 2023). Această descoperire arată că și animalele, la rândul lor, manifestă un feedback pozitiv față de copiii umani abandonați în junglă pentru ca aceștia să poată învăța comportamentul animal. Un comportament intruziv, agresiv al mamei nu poate declanșa sincronizarea creierului copilului (Endevelt-Shapira și Feldman 2023). Dezvoltarea unor abilități a copiilor crescuți în sălbăticie se datorează probabil în mare parte feedback-ului pozitiv pe care mamele animale sunt capabile să îl dea copiilor umani. Primele studii făcute în 2018 de japonezi au arătat că un simplu zâmbet al mamei este capabil să producă o sincronizare wireless cu creierul copilului (Minagawa, Xu și Morimoto 2018). Se pare că această capacitate de a sincroniza este înnăscută. Sincronizarea se realizează atunci când semnalele sunt transmise în mod direct între două ființe. Aceste semnale pot fi o clipire a ochilor, o mișcare a privirii sau un semnal auditiv. În comunicarea noastră cu animalele utilizăm acești stimuli dar și animalele folosesc aceeași tehnică. Nu este de mirare că acești copii abandonați în junglă sau în alte medii ajung să comunice cu animalele foarte bine. Un exemplu elocvent în acest sens este Jane Goodall care a trăit zeci de ani cu maimuțele în junglă pentru a studia comportamentul și limbajul acestora. Ea a plecat la vârsta de 26 de ani (1962) din Anglia și s-a stabilit în Tanzania. A fost prima femeie, dar și primul cercetător, care și-a dedicat întreaga viață pentru a înțelege animalele, în special cimpanzeii. A făcut acest experiment în mijlocul lor, sincronizând comportamentul ei cu al cimpanzeilor (Jane Goodall Institute 2015).

Credem că nu avem nevoie de o tehnologie foarte avansată pentru a învăța să comunicăm cu animalele pentru că noi oamenii deja o facem. În afară de acest mecanism de sincronizare, creierul mai posedă un mecanism de transmitere a informațiilor care nu are nevoie doar de interconexiune neuronală. Există un câmp slab

electromagnetic, care asigură la rândul lui transmiterea wireless a informațiilor, în același timp cu transmiterea electrică prin intermediul axonilor. Într-un studiu realizat în 2014 se arată că de fapt câmpurile electrice din gama câmpurilor endogene sunt suficiente pentru a excita țesutul neuronal și pentru a susține o undă de propagare fără transmisie sinaptică. Mai mult, aplicarea unui anti-câmp slab este suficientă pentru a bloca propagarea activității periodice lente din hipocampus (Chiang et al. 2018; Zhang et al. 2014). Nu avem nevoie de un limbaj ultrasofisticat pentru a transmite o informație vitală. Sunt studii ce sugerează că există amprente chimice distincte, independente de comunitatea culturală a expeditorilor și a destinatarilor. Mai mult, aceleași efecte psihologice și fiziologice se regăsesc la oameni și la câinii de companie. Aceste constatări sistematice sugerează că există amprente chimice a compușilor din transpirație. Ceea ce rămâne de studiat este dacă astfel de compuși invarianți activează un răspuns emoțional automat sau dacă răspunsurile emoționale sunt învățate (Semin et al. 2019). Comunicarea interspecii nu poate fi facilitată de nici o inteligență artificială dacă nu este acompaniată de emoții autentice. Nimeni nu poate înțelege din cărți ce înseamnă să ai copii și să comunici cu ei. Trebuie să ai proprii copii ca să înțelegi această experiență. Noi comunicăm cu animalele noastre de companie într-un mod care nu are nevoie să fie tradus într-o limbă specifică. Dacă am putea vorbi cu câinii noștri probabil că farmecul comunicării s-ar diminua. Doi oameni îndrăgostiți nu au nevoie de multe cuvinte pentru a se înțelege: ei știu să comunice pe alte canale ce pot exprima mult mai mult decât cuvintele. Cu cât acordăm mai multă atenție animalelor, cu atât descoperim noi forme de comunicare care determină o înțelegere mult mai profundă a acestora. Creierele ființelor umane și non-umane reprezintă cea mai avansată tehnică existentă și trebuie doar să învățăm să o folosim mai bine.

Inseparabilitatea cuantică observată în creierul uman

Într-un experiment pe baza rezonanței magnetice RMN s-a observat entanglarea dintre creierul subiecților testați și inima lor (Kerskens și López Pérez 2022; Greene 2022; News 2022). Deși au apărut imediat critici asupra experimentului în ceea ce privește cauza și chiar entanglarea în sine (Warren 2023), fenomenul este prezent și, atât timp cât nu știm ce este conștiința, trebuie să dăm atenție fiecărui fenomen și să continuăm să căutăm cauza în loc să negăm fenomenul. Problema conștiinței rămâne și probabil că tehnologia viitorului ne va apropia din ce în ce mai mult de răspunsul corect. Procesele cuantice ale creierului ar putea explica de ce putem depăși super computerele atunci când vine vorba de circumstanțe neprevăzute, de luarea deciziilor sau de învățarea a ceva nou. Realismul nelocal este strâns legat de punctul de vedere susținut de Erwin Schrödinger, conform căruia „numărul total de minți de oriunde este unul singur” (Schrödinger 2012, 135).

El a mers mai departe, sugerând că mintea a ridicat lumea fizică exterioară din propria sa materie mentală. Conștiința universală interconectată constituie realitatea nelocală, singulară, implicită a unei conștiințe universale care a încorporat în sine universurile locale și conștiința locală, explicită a fiecărui individ (Lohrey și Boreham 2020). Creierul uman rămâne cel mai fiabil sistem care funcționează ca un computer cuantic la temperaturi normale. Dar creierul uman este mai mult decât un calculator cuantic. Creierul este o mașinărie creată de univers care posedă o conștiință în afara spațiului și timpului și care are influență asupra materiei la nivel microcosmic și macrocosmic. Conștiința este nelocală și, prin urmare, comunicarea realizată prin entanglement cuantic are loc instantaneu la nivelul creierului, al conștiinței și al universului. Știm că animalele au conștiință și poate că, folosind creierul și conștiința, în viitor vom putea comunica cu

animalele nu doar la nivel semantic, ci și la nivel imagistic și emoțional. Poate că animalele folosesc deja acest tip de comunicare rapidă wireless prin sincronizare, nu doar între ele, ci și cu noi, oamenii. Se pare că ființa umană a uitat să folosească această metodă și este posibil ca doar copiii să o folosească pentru o scurtă perioadă, până când încep să devină adulți (Danesh 1993).

Poate că sfinții din vechime foloseau deja acest tip de comunicare pe care, odată cu dezvoltarea fizicii cuantice, abia începem să o înțelegem.

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Art-Histories. Narrating Animals in Aesthetic Practices

Jessica Ullrich *

Abstract

In the history of Western thought, the difference between humans and other animals has been primarily determined by the alleged absence of logos, language and rationality in nonhuman animals. Contrary to this postulate, many artists in the past and present have given nonhuman animals a human voice, especially in fables, children's books or cartoons. Artists let animals speak for a variety of reasons, mostly simply for saying something about other people in a disguised way. But sometimes artists use animal storytelling as a tool for advocacy or to make animal alterity tangible. They invent speaking animals as an artistic strategy in order to suggest ways out of anthropocentrism. They give animals a human voice as a tool to raise empathy. In my argument I introduce artworks that construct nonhuman animals as speaking beings. What all these artworks have in common is that they insist on the fact that other animals have their own worldview and their perspective is valuable and worth listening to. The attribution of language to animals in artworks can be a bold and empowering move to see animals differently. Ascribing thoughts and emotions to other animals is far less problematic than denying animals such capacities. Anthropomorphism is less dangerous than anthropodenial; an animistic worldview holds more truth than a mechanistic worldview. I want to show examples in which artistic forms of strategic anthropomorphism can raise awareness for the plight of other animals, challenge human exceptionalism and help us see animals differently.

Keywords

art history, storytelling, speaking animals, anthropomorphism, animal voice, animal narratives

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Interview with a Cat

In 1970 Marcel Broodthaers recorded a conversation with his cat and exhibited it as a sound installation. In the work he treats the cat as an art expert and asks her questions about painting, the museum, and the concept of art. For example, he asks her whether an object, that we obviously don't see in this sound recording, is a good artwork. Broodthaers turns René Magritte's famous sentence "Ceci n'est pas une pipe" into the opposite and claims "Ceci est une pipe". You probably all know Magritte's painting showing a pipe and the writing "Ceci n'est pas une pipe" ("This is not a pipe"). This apparent paradox explains the simple fact that an image is not identical to its corresponding object. It stimulates a reflection on the relationship between art and reality. While René Magritte wanted to point out the constructed character of art and the ontological and epistemological separation of an object and its representation, Broodthaers exhibits the dilemma of communication in general and of interspecies communication in particular. Even though the work is supposed to be a satire about a self-reflexive artworld with its enigmatic agreements about the nature of art, the recording makes the impression of a real dialogue in which one partner responds to the other and vice versa (Dimke 2019, 155). Broodthaers apparently takes the cat's vocalizations seriously and wishes to know what she is saying. He uses the formal form to address her with "vous" when he asks her again and again the same questions as "Is this a pipe?" before ending the conversion with "Then let's close the museums."

The increasing urgency in both voices keeps the conversation going. The cat's vocalizations obviously signify something, even if the audience does not grasp its meaning just as Broodthaers' utterances are not understood by people who don't speak French. The artwork can be either read as a document for a failed communication or as a serious attempt at an interspecies understanding, however futile it may appear

in a purely semantic sense. Whenever humans choose not to ignore what an animal has to say, they need to pay close attention, to interpret and translate animal narratives, thus risking misunderstanding them and making animals mere mouthpieces for human affairs. (The same might be true the other way around.) Just as Broodthaers' voice changes in tone from energetic to questioning, then to thoughtful, and finally to impatient, the meowing of the cat also has clearly expressive values and increasing urgency. She obviously tries to make sense of what this human is saying. Apparently, cats meow only when they are communicating with humans, not with other cats, which also reminds me of Michel de Montaigne's famous quote: "When I play with my cat, how do I know that she is not playing with me?" (de Montaigne 1588, 108). Whatever the intention of the artist, this work implies that the mere assumption that cats don't have language and that they have nothing to say is based on ungrounded notions of human exceptionalism.

In the history of Western thought, though, the difference between humans and other animals has been primarily determined by the alleged absence of logos, language and rationality, in nonhuman animals (Wild 2007). Contrary to this postulate, many artists in the past and present have given nonhuman animals a human voice, especially in fables, children's books or cartoons (Armbruster 2013, 17-33; Suen 2015; Ullrich and Böhm 2019). Artists let animals speak for a variety of reasons, mostly simply for saying something about other people in a disguised or fanciful way. But sometimes artists use animal storytelling as a tool for advocacy, or to make animal alterity tangible. They invent speaking animals as an artistic strategy to suggest ways out of an anthropocentric worldview. Other than Broodthaers they don't only ask us to believe that animal voices make meaning and that only some genius artist can understand them, but they give animals a human voice as a tool to raise empathy. In the following, I want to

introduce artworks that construct nonhuman animals as communicating beings in a human way in different manners. What all these artworks have in common is that they insist on the fact that other animals have their own worldview and that this perspective is valuable and worth listening to.

The Great Silence

From all animals, parrots are probably the ones we believe are most capable of speaking– just because they really do. And a parrot narrator is the protagonist in *The Great Silence* (2017), created by Jennifer Allora and Guillermo Calzadilla, a video installation about the last population of wild Puerto Rico Amazons, consisting of only about 40 individuals that live near the largest radio telescope in the world, the Arecibo Observatory in the forest of Rio Abajo in Esperanza, in Puerto Rico. The population has declined mainly because the birds' habitat was destroyed after Europeans settled in Puerto Rico. But also hunting and capturing birds for ornamental bird keeping, as well as the introduction of foreign species that eat eggs and chicks, have contributed to the rapid decimation of the species. For their video, Allora and Calzadilla decided to let a representative of this critically endangered species reflect the relationship of humans and parrots and technology from his perspective. Other than one would expect, he doesn't actually speak, yet his thoughts are delivered in writing. For the entire 17 minutes of the video, we are following the avian' thoughts by reading subtitles that were scripted by the science fiction author, Ted Chiang. In written language the parrot expresses his amazement about the fact that people are researching intelligent life on other planets instead of dealing with intelligent life on earth. He reflects on the so-called Fermi paradox, which is sometimes also called the "Great Silence" and gives the video its name: because the universe is so immeasurably large, intelligent life must have arisen in many ways

and because it is so immeasurable old, there must be species that have had the time to travel through it. Yet, no sign of life is found anywhere except on Earth. One should actually hear a cacophony of voices, yet it remains silent. The parrot wonders if an existing intelligent species might want to hide its presence for fear of hostile conflict. In his eyes that would be a wise decision, since he himself belongs to a species that was almost wiped out by humans: "Hundreds of years ago, my kind was so plentiful that the Rio Abajo Forest resounded with our voices. Now we're almost gone. Soon this rainforest may be as silent as the rest of the universe."

The video captures images of Arecibo engaged in the vain attempt of receiving radio waves and sending them out into the universe. If the Arecibo messages were ever answered, humans would take it as a sign of intelligent life in space. However, a comparable response from the animal world is often not recognized, even though humans have long cohabitated with parrots. This is probably because people often only recognize human language as communication. However, ethological research shows that many animals not only communicate with each other, but also (can) respond to humans. Frans de Waal recently asked whether people are smart enough to understand how smart animals are, thereby initiating a change of perspective (de Waal 2016). The burden of proof for existing emotional or cognitive performance should therefore no longer lie with the other animals. Rather, people should question their own achievements and abilities when it comes to interpreting animal behavior or understanding animal communication. In *The Great Silence*, the sad tale of missed opportunities gets a humorous twist when the narrator admits that parrots, too, have long thought humans not intelligent because it's difficult to make sense of a behavior so different from one's own. Yet parrots and humans are much more genetically similar and spatially much closer than extraterrestrial life could ever be.

Parrots, just like humans, learn vocally. In fact, the narrator in *The Great Silence* also objects: "But I and my fellow parrots are right here. Why aren't they interested in listening to our voices? We're a non-human species capable of communicating with them. Aren't we exactly what humans are looking for?" The narrator clarifies that the Puerto Rican parrots, just like humans, have also myths that will be lost with their imminent extinction. The video alludes to the fact that the extinction of a species means more than 'just' the disappearance of a specific species, it represents an irretrievable loss of languages and ways of live. With each extinction, a whole culture is silenced forever.

The video ends with the parrot declaring: "My species probably won't be here for much longer; it's likely that we'll die before our time and join the Great Silence. But before we go, we are sending a message to humanity. We just hope the telescope at Arecibo will enable them to hear it. The message is this: You be good. I love you." The narrator borrows this final message from the gray parrot Alex, whose language and cognitive abilities have become famous and whose last words before his death addressed to his human companion Irene Pepperberg have been: "You be good. I love you." (Pepperberg 2000; Pepperberg 2009; Chandler 2007, 1).

The tragedy of this last chance for contact with non-human species corresponds with the location of the video: Arecibo becomes a symbol of human hubris, human loneliness, and human ignorance, all of which could be seen as the cause of the current Anthropocene crisis. Allora and Calzadilla's deeply melancholy work serves as a reminder not to miss encountering other species while waiting for a much more unlikely encounter. In their message to humanity, which they put in the mouth of a parrot, they plead, without any bitterness but with great sadness, not only to listen to the birds, but to exchange ideas with them at eye level before it is too late. With the work they mourn the missed opportunity of making contact. But the place where the species meet is

called Esperanza, meaning “hope”. This cannot be a coincidence but proof for the basic ability of people to empathize and take responsibility and, maybe, finally make kin after all.

Canine Narrators

Dogs are the animals who humans are most likely to believe that they understand what they are communicating – and due to their long co-evolution sometimes probably rightly so. So, it is no wonder dogs are the most popular narrators in artworks. The storyteller in Kathy High’s video, *Lily does Derrida* (2010-2012), for example is the artist’s late mixed-breed bitch Lily. Right at the video’s outset, the dog informs us about her death which establishes the fictious character of the work: usually neither dogs nor the dead are able to express verbally. Furthermore, the female dog speaks with the voice of a male human while giving an account of her life as well as commenting on Jacques Derrida’s essay *The Animal That Therefore I Am* (Derrida 2008). According to High, *Lily does Derrida* is a “video essay made in collaboration with Lily Dog about companion animal relations, and interspecies communication. […] In this video essay, Lily Dog looks at Derrida’s writings and makes a case about how human and non-human understand each other – or not – based on her own life and adventures” In the course of the half-hour film, often filmed from very low camera angles, one witnesses the daily life of the old dog: “I am, I was a dog, I live with a human and two cats.” Lily eats and drinks, takes a walk, communicates with the cats and with High herself, who walks into the frame every now and then. We learn from Lily that it is High who is creating the video for her: the dog thus figures not only as the protagonist but also as the initiator of the film project, with the artist allegedly only functioning as her medium. “There is this bond, you see. She thinks she understands me. Maybe she does better than most. I think I understand her too. We talk a lot about our day’s events.

She lets me complain, which I do a lot lately. And sometimes we just enjoy sitting together."

Lily describes how she had been adopted by High as a street dog, how she eventually got sick and blind and needed to have one of her eyes removed. The video offers an unsentimental documentation of the old dog's painful physical deterioration as well as the affectionate and at times paternalistic care demanded by the circumstances. We see Lily rubbing her itchy eye: "I've been going blind for some time […] I ignored it first, just barked more. I guess to cover it up. Then my right eye started swelling, we could not ignore it any longer. She had to take it out, it was very painful." The work's unsparing account of Lily's worsening condition conveys an idea of the existential vulnerability of animals and speaks about the shared responsibilities in multispecies households ("*we* could not ignore it any longer").

While we are being shown images of her after the surgery, with swollen eye and neck brace, Lily tells us about the reasons for her interest in Derrida, who, as she explains, more than any other philosopher was able and willing to understand animals as individuals. Derrida also reiterated the question, already posed (and affirmed) by Jeremy Bentham almost 200 years ago, whether animals can suffer. Lily states the obvious: "Yes, we can suffer."

High lets Lily enunciate her own perspective on this particular human-animal bond while, at the same time, questioning her as a reliable narrator "I know you all think this is anthropomorphizing me." And she lets her ask quite philosophically echoing Derrida: "Does the animal dream?' 'Does the animal think?' Does the animal have a language and what language? Does the animal die?" And "How do human animals think about nonhuman animals?" Such self-reflexive moments point to the constructedness of the artwork and reveal anthropomorphism as a deliberate artistic strategy. Implicitly, however, viewers are left to ask whether the reflexive dismissal or even

ridicule of anthropomorphism might not just as well serve the anthropocentric function of denying emotional sensibility to other animals.

Towards the end of the video, we see Lily taking a walk around a frozen lake before she tells how she was found dead in the lake. There are underwater recordings of vines, murky water, light reflexes; we hear gurgling as the cinematographic creation of an underwater death struggle. This scene is followed by an abrupt cut to Lily's body on a white sheet, half covered by a cloth. The camera, now in a very tactile manner, zooms in on and circles almost tenderly around the individual parts of the dead dog's body: Lily's fur, one of her ears and eyes, her paws, her tail. As we learn from the animal narrator, her remains have been taken care of: "She, who makes this video buried me appropriately under many feet of soil by her garden."

The video ends with a series of long low-angle shots which show grass swaying in the wind and a grey cat looking directly into the camera – maybe a hint to Derrida's encounter with his cat that initiated his animal philosophy.

High's film suggests that it is wrong to deny other animal's consciousness, cognition, emotion, and language. But of course, we must be aware that the video also tells us more about the artist's beliefs and ideas concerning other animals than about Lily dog herself.

While it might seem natural to interpret the thoughts of one's own companion animal and translate them into language for others to understand, it is less obvious to imagine what a wild animal would say.

In her participatory work, *Lex Wolf* (2019), Nieves de la Fuente Gutiérrez deals with human-wolf relationships. She offers an audio walk where one can become a wandering she-wolf complete with fur ears and a spray bottle of wolf urine to make territorial marks at self-chosen locations outside the exhibition space. While walking around,

one has to listen to the wolf narrator whispering about her threefold marginalization as a nonhuman animal, a female and a foreigner in the country. She talks about the many prejudices that circulate about her species and tries to trace their origins: "Since I can remember, I was narrated as your worst nightmare." It is only through constantly repeated horror stories that the fear of the wolf is maintained. By addressing the sense of hearing and smell, the artist distances herself from the anthropocentric primacy of vision – there is no wolf to be seen - and engages at least to some degree in a different, canid way of perceiving the world. For example, she asks the listener: "Turn around, I want you to smell the room". Gary Snyder speaks of scent trails as an animal form of poetry (Synder 1990). And Gilles Deleuze also describes the marking of a territory as the birth of art (Deleuze 1998). The spraying of wolf urine can therefore also be read as a form of aesthetic expression. The artist also makes the reports of several German Bundestag sessions on the so-called "wolf question" available as additional info material.[1] Reading the records, one can see how many projections and misperceptions about wolves are still circulating. And the irrational hatred of wolves, fueled by all kinds of fiction, has real-world implications for the species that was nearly extinct. Also, attributions that characterize wolves as invasive species follow the same racist logic used to marginalize human refugees. With the work that for once tries to give a voice to the victim of stereotypes and prejudices to share her perspective, Nieves de la Fuente Gutiérrez deconstructs the tales of the "bad wolf" as fairy tales, defamation and political lobbying. By speculatively adopting the fictious she-wolf's worldview and empathizing with her experience of alienation, she

[1] Wolves have been extinct for quite some time in Germany. Since they are starting to come back, they have been protected by law as endangered species. But as numbers are rising, the German parliament is discussing how to manage the animals so that they don't become a danger to humans or livestock in the future.

raises empathy. On the soundtrack, the she-wolf insists “Our otherness is not absolute” and promises “I still have a lot of things to tell you.”

Speaking Lion and Becoming Lioness

EvaMarie Lindhal also gives voice to a wild animal, one that she only knows from paintings. In the video *The Artist Named me Nero*, she adapts the voice of the lion Nero who the artist Rose Bonheur kept in her private zoo in Fontainebleau so that she could paint him whenever she wanted. Bonheur is one of the most famous animal painters of the 19th century and is known for depicting domestic and exotic animals in a naturalistic way without anthropomorphizing her models. In art history she is often praised not only for her lifelike animal paintings but also for her animal-friendliness. The way she treated her animal muses and models might be considered progressive for the time, but it was nevertheless cruel from the perspective of the animals kept at her disposal in cages. EvaMarie Lindhal speaks in the name of Nero to tell the viewers about how he suffered under the living conditions at Bonheur's estate and lets him articulate how his needs were subordinated to the curiosity of the painter. She speaks in the first-person singular and recapitulates Nero's life through the photographs and paintings that exist of him and his life situation. While narrating, Lindhal browses through art books and shows photos of Bonheur’s house and garden, where she surrounded herself with painted, taxidermized, as well as live animals. Lindhal places corners of golden frames around different pictures, as if to indicate the restricting golden cage in which Nero was kept. Mobile phone displays, book pages, painting frames and the video monitor become framing devices that immobilize Nero and turn him into a mere object of observation and display, thus denying his subjectivity and agency. Ventriloquizing Nero, Lindhal points to the fact that Bonheur could have had the potential to see Nero differently: “I have seen a painting of myself

where I am standing alone in a landscape so vast the horizon is almost invisible. […] There is so much longing in me and you have understood and portrayed this longing. You must have felt what I feel to be able to portray me like this. You felt my suffering, but you kept on causing it." And Nero also refers to the rendering of animal bodies into pigments or taxidermy specimens that Bonheur was involved in. "You know of our suffering of the knife that has to pierce our bodies to become material, still you keep on doing it." By putting words into Nero's mouth, Lindhal points not only to the wrongs done to this individual lion in the name of art but challenges the violence inherent in all animal representations. The artist not only exhibits the video but sometimes also gives lecture performances speaking as Nero while showing the visual material. By doing so she enacts an even more visceral storytelling borrowing Nero not only her female voice but also her female human body.

Other artists use only their body language to empathize with other animals and help make their supposed feelings readable for a human audience. This is the case for the performance *Lie–in* (2013) that also questions the caging of a lion without using any verbal language. The performance was conceptualized by Joanne Bristol and acted-out by Shannon Rose Riley in a gallery in Berlin. The instruction for Riley was to carefully observe a zoo lion's movements, expressions, and use of space for a few hours, memorize it and then physically re-enact it from memory in another space. Riley chose an elderly lioness in the Berlin Zoo and observed her as closely as possible while the lioness showed her normal daily routine of eating, sleeping, getting up, lying down, and pacing. Already at the zoo, Riley instinctively mirrored the lioness to train her body memory. She then transferred the memorized movements into the gallery space during a two-hour performance. She later stated that simply by mimetically imitating the lion's movements from memory, she came to a new visceral understanding of space. In

fact, it is known from studies of the so-called mirror neurons that just by observing movements, similar brain activities take place in the observer as in the individual performing the action (Rizzolatti and Sinigaglia 2007). When we watch someone laugh, the same neurons are activated in our brain as in the laughing person. In addition, intentionally empathizing with a specific bodily experience that is usually associated with a specific feeling can result in triggering that emotion. So, consciously laughing in a neutral situation can actually make you feel happier. In any case, Riley described in an interview following the performance – and this is where verbal language comes into the game - how sadness and a feeling of hopelessness overwhelmed her during the performance. Despite the slowness of the movements and the small range of motion, she found the performance to be extremely exhausting. She felt sadness about her spatial confinement, and she felt uncomfortable being totally visible to the gaze of the gallery visitors. *Lie-in* was an exercise in embodied knowledge that opens an empathetic gateway into another animal's experience. The performance was also difficult for some viewers, who felt uncomfortable and out of place. Some felt sorry for the performer and were affected by her emotions, others were embarrassed when they became aware of their own voyeurism. The multiple dislocations - from the zoo to the gallery, from one species to another, from the artist's feelings to the audience - gave access to imaginative spaces that make the dislocation and spatial limitation of the real lioness viscerally tangible – without the need of verbal language.

Becoming Octopus and Tentacular Thinking

While putting oneself in the perspective of another mammal might be regarded easy, to get into the spirit of a cephalopod is a whole different story (Godfrey-Smith 2018; Montgomery 2016). In their ongoing project *Visiting Octopus,* the artist duo Hörner/Antlfinger is

trying to channel the experiences of captive octopuses in public aquariums. For each individual in the work series, they display a Google Earth View image of his or her location, a black and white photo of the building's facade, a black and white photo of the tank with the octopus inside, a wall text describing an empathy exercise, and an audio recording of the background noise on site, plus the oral account of the situation. The media and the perspectives change, the more the spatial and psychological distance to the octopus decreases. The Google Earth image as an apparently neutral map view that one would consult when looking for a tourist attraction alludes to a disembodied view from space, a surveillance perspective on Earth and the omnipresence of capitalist global networks. The photos of the facade of the aquariums present a typology of the different framings to display octopuses. There are for example allusions to scientific laboratory situations, natural history museums, or places of spectacle like cinemas. The photos of the tanks show the various stereotypical staging methods: the miniature of a sunken city, vases, replicas of caves or diving helmets. All these theatrical backdrops are designed for human visitors only. For the animals, the tanks only represent the smallest possible habitat in which they can survive. Hörner/Antlfinger also provide texts with transcriptions of the empathy exercises they conduct in front of the tanks. They learned the technique of guided imagination, which has roots in shamanistic practices, from an animal communicator (Breytenbach 2014; Wijngarden 2023). It involves a trance or limbic resonance that begins with breathing in sync with the octopus and politely asking permission to slip into his or her body and then waiting for sensations, thoughts, and ideas to appear. One of the transcripts elaborates the becoming octopus like this: “The tentacles are like a hand attached to this heart. […] And these eight fingers are much more sensitive than those of a human hand. I can sense everything with them.” In another one they tell “When I managed to enter into his

body, I felt powerful and heavy. I couldn't connect with his three hearts, but when I attuned my breath to him, I had to cough, as if something had gone down the wrong way. Then I felt the cool fresh water in my throat, and I pumped it pleasurably through my siphon." The practice ends with the expression of gratitude to the octopus for their hospitality. With their approach, Hörner/Antlfinger draw on contemporary scholarship on intuitive interspecies communication that discusses such alternative methodologies as attempts to engaging animals as active partners in knowledge production and as an innovative way to deepen understanding on animal standpoints. Through imaginative shapeshifting, the artists divert the attention from the violent framing of the individual through capture, staging, total control, labeling, etc., back to her own agency, history, and subjectivity. By strategically using anthropomorphism, they introduce the octopuses as active narrators in a shared story. For example, the transcript of one of the meditations reads partly like this: "I felt fearless, well aware of being trapped in terrain that I wished would be bigger, but also safe. Looking out into the exterior space, making contact with humans, terrified me at first because they are enormous. From the way they approach the tank it was clear to me that they are beings that try to comprehend everything with their two eyes. […] Eventually I realised that they cannot harm me. Nevertheless, it is always frightening to see them from up close." And in another: "Why are you here? There is nothing to see! Certainly not me, I will always hide. Although I won't grow old, I have the feeling that my time in the aquarium is endless – a thousand years heavy." By speculatively reversing the perspective of observer and observed, Hörner/Antlfinger refuse to see very specific individual octopuses as objects of knowledge or entertainment and insist that they are subjects with their own worldview who are able to reflect their situation.

Tuomas A. Laitinen also works with octopuses. He doesn't empathize with them but nevertheless implies that they have some alien form of storytelling, even in written language. He has created glass objects in the shape of organs with multiple chambers, exits, and entrances as *A Proposal for an Octopus* (2019). He put one of them in the tank of the lab octopus Napoleon resulting in the mesmerizing video *Haemocyanin* that draws its appeal from the visual contrast of the hard glass and the soft body. Watching the octopus exploring the object gets viewers a glimpse of his multi-sensory "tentacular thinking" and makes them realize the importance of the sense of touch in understanding his world (Haraway 2016, Chapter 2). Laitinen is aware of the problems raised by recordings in a panopticon-like aquarium. Both the conditions in a laboratory and the very filming process involve violent and objectifying appropriation. By adding visual and acoustic disruptive effects, Laitinen points to the artificiality of the framing, emphasizing his own artistic intervention and the role of the technical equipment. The octopus is superimposed by computer-generated water droplets and glass bubbles, which move over the image like additional lenses, zoom in and out and constantly generate new distortions, refractions, or magnifications, but make the octopus himself partly invisible. The idea of being able to get insight through close observation is rejected in Laitinen's film. Recurring elements are snake-like cords dancing over the screen which become more and more obscure until they finally become undulating ornamental blue lines that appear like diffractive waves of light or sound. They are easily recognizable as abstractions of the movements of the arm of the octopus, traced graphically and depicted as CGI glyphs. The artist suggests that the octopus, with his gestural language, has his own script, a fluid and preliminary system of signs in which language is not yet separated from the body. Laitinen refers to them as asemic writing, a form of writing that has no decipherable meaning.

Octopus writing is also a topic that Vinciane Despret has elaborated on in her recent science fiction story *Autobiographie d'un poulpe* (2021). It is a research report on the efforts to decipher an ink writing left by an octopus on a potsherd on the sea floor. The main protagonists are a young researcher from the "Association de thérolinguiste" alluding to Ursula LeGuin invention of therolinguistics as the art of reading the traces of animals, and the symenfant Ulysee, a child in symbiosis with an octopus which is an allusion to Donna Haraway's *Camille Stories*, tales about children of the compost who are able to enter into symbiosis with other animals (Haraway 2016, Chapter 8). Citing sources from different fields of knowledge, the protagonist expresses her belief that the ink clouds of octopuses have a complex expressiveness and contain a comment, a message or a signature like in a speech bubble. The ink is not simply a protective screen to escape behind, but also forms a lure. It is not just about hiding, it's also about showing something, not just about not being seen, but about making something visible. The same can be said about Laitinen's video in which there are also allusions to ink clouds. But other than in Despret's book, the meaning stays enigmatic.[2]

Coral Utopia

Artists also give voice to animals who are even more alien to humans than octopuses and who are sometimes not even considered to be animals at all. With *Coral Reef Are Dreaming Again* (2014) Lucas Leyva and the artist collective Coral Morphologies created a short psychedelic video largely set in a post-apocalyptic underwater world

[2] In the translation of the octopus' writing in Despret's book, it turns out that octopuses practice reincarnation. This also explains why they are so intelligent, even though they don't learn socially. In Despret's future, due to poisoning of the seas and overfishing, octopuses have become rare, leaving many disembodied souls of deceased octopuses in a kind of queue. That is why the octopus calls out to her future self as well as to a future reader: "Don't forget yourself. Do not forget me."

in which the story is told from the point of view of corals dreaming of the past. In fascinating close-ups of colorful coral polyps swaying in the current, one can listen to the conversation of two coral protagonists. The conversation is fragmentary and full of allusions to the world-building capacities of corals: "I dreamed I was a city. […] I dreamt our bones were dried and used to make dwellings for other creatures. […] I dreamt we overtook these bones. We devoured the skeletons of our ancestors. He is not me, but he is also me. He dreams of me. He will become me." Corals, who grow on their own skeletons and thus create increasingly powerful structures, can be read as a symbol of the entanglement of organic and inorganic matter. The narrative revolves around the coastal city of Miami that has vanished because of climate change and about the queer party crowd that also disappeared. The literal queerness of corals as beings who were once taken for stones as well as for plants and who cannot be thought of as a fixed individual subject, but only as collectives and multispecies communities, is brought together with images of a man transforming into a beautiful woman with colorful make-up. Just like this drag queen, corals also defy any categorization. As hermaphrodite beings, they can reproduce sexually, but also asexually through fragmentation or budding. As the camera zooms out of the frame, it is exposed that the corals are growing inside the eyeballs of a human skull. In this narrative, humans are the ones who are extinct, not corals. Human remains serve as their exoskeletons. Animal communities have colonized the ruins of human civilization and built their own culture on it.

The future is told as a utopia for corals. The post-anthropocene is no longer exploitative, but world-forming. Nothing is lost in the ocean's metabolism; everything is ephemeral and constantly being rebuilt. Biological life becomes geological life (Bakke 2017). Donna Haraway reminds us that the task of making kin is to create new connections and to not only live together but also die together well

(Haraway 2016, Chapter 4). In a storytelling way *Coral Reefs are dreaming again* imagines how this could look like.

Conclusion

Generations of philosophers defined 'the animal' in terms of a supposed lack of some sort, which was then employed to distinguish them from humans, with the incapacity for language being a particularly stable criterion. The absence of verbal language has been used to mark nonhuman animals as inferior, as the human capacity for verbal and written language does not merely constitute difference but superiority. So, the attribution of language to animals within artworks can be a bold and sometimes an empowering move. Ascribing thoughts and emotions to other animals is far less problematic than denying animals such capacities. For other animals, anthropomorphism is less dangerous than anthropodenial (de Waal 1999); an animistic worldview holds more truth than a mechanistic worldview.

However, the representation of storytelling animals is not always liberating, it can challenge and redefine, but also confirm anthropocentrism because it neglects and ignores the richness of actual animal communication. I have shown examples showing beyond proof that artistic forms of strategic anthropomorphism can indeed raise awareness for the plight of other animals. Artworks like the ones discussed are needed because humans often recognize communication only in the form of human language. Artistic storytelling is at least one much-needed attempt to deconstruct human exceptionalism.

Having said that, I think art is also a powerful tool that makes people aware of all the other ways nonhuman animals communicate and respond. I just very briefly hinted at the possibility of scent or body languages that again have been translated in a human framework of meaning making. I believe that just as the scent traces of deer might be their poems or the songs of birds might be their narratives, there are

probably many more autobiographical stories by other animals in media that we humans cannot even detect with our limited senses. So, a 'polite' attempt to communicate across species boundaries, even if it's only imaginary, like the one rather ironically suggested by Marcel Broodthaers in his interview with a cat, may open up new pathways into other animal worlds. I think rather than giving voice to other animals we need to put more effort into listening and starting conversations with the other animals – no matter how difficult or even impossible a mutual understanding might be. Other animals already have a voice. To assume they don't have anything to say is paternalistic and anthropocentric. If one always only talks about animals instead of talking with them, the outdated paradigm of the active human being as subject and the passive animal as object is confirmed over and over again. And when animal narratives are stories that humans can recognize as stories, or stories that humans themselves could have told, we are missing an opportunity to learn about stories that only other animals can tell. We need to find more imaginable ways to connect to other animals' perspective, and spoken human language is a first step but it is clearly not enough.

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Joanne Bristol: *Lie-in*, 2013, Performance, approx. 2 hours
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Marcel Broodthaers: *Interview with a Cat*, 1970, Audio, 4,58 min
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Nieves de la Fuente Gutiérrez: *Lex Wolf*, 2019, Installation
https://soundcloud.com/nieves-de-la-fuente-334147369/lexwolf-loud

Kathy High: *Lily does Derrida*, Video, 29,16 min
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Ute Hörner / Mathias Antlfinger: *Visiting Octopus*, 2019, Installation
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Tumoas A. Laitinen: *Haemocyanin*, 2019, Video, 8 min
https://vimeo.com/369007292 (Trailer)

Lucas Leyva / Coral Morphologies: *Coral Reef Are Dreaming Again* (2014), Video, 3,05 min
https://vimeo.com/219736461

EvaMarie Lindhal: *The Artist Named me Nero*, 2020, Video, 5,39min
https://www.evamarielindahl.com/the-artist-named-me-nero/ (Excerpt)

What is The Multispecies Collective?

GC. Heemskerk*
in collaboration with the Multispecies Collective



Portrait of a spider on their web[1]

Abstract

The Multispecies Collective challenges the anthropocentric idea that only humans make art, by recognizing the artworks of other species. Emphasizing reciprocal relationships and communication through common language games, they aim to foster empathy and understanding across species boundaries. By appreciating the beauty of non-human artworks like spiderwebs, parakeet holes, and dog dens, the collective promotes an ontological shift towards more kindness and deconstructing the animal/human dichotomy.

Keywords

Multispecies Collective, collaboration, anthropocentrism, non-human art, common language games, imagination, empathy

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[1] All the drawings are made by GC Heemskerk, 20 x 30 cm, watercolor on paper, 2023.

> For once, Mr. Bones was glad that he had not been endowed with the power of human speech. If he had, he would have been forced to tell Willy the truth, and that would have caused him much pain. For a dog, he would have said, for a dog, dear master, the fact is that the whole world is a symphony of smells. Every hour, every minute, every second of his waking life is at once a physical and a spiritual experience. There is no difference between the inner and the outer, nothing to separate the high from the low. It s as if, as if…'
>
> — Paul Auster, Timbuktu

Intro

Mr. Bones is the main protagonist In Paul Auster s novel Timbuktu, a mixed breed dog living with Willy G Christmas, his homeless human. Willy is what most people would call crazy. One of the main pursuits of Willy is trying to make a grand artwork consisting of smells. To do so, he collects something that most people would call trash, especially trash with a heavy smell. Willy wants Mr. Bones to test the artwork and see if it is truly the beautiful symphony of smells he has been searching for. You can perceive Auster s story as using anthropomorphism as a tool to train imagination and empathy for the Other. By reading and writing fiction you have to imagine what it is like to be someone else.[2][3] In this case, how it is to feel and think like a dog. *What must it be like to live with a human?* But Auster goes even further, he imagines what it must be like to be a dog and collaborate

[2] Dutch writer Renate Dorrestein argues that the main goal of fiction is knowledge reproduction, since fiction, like no other, makes one really understand another, or a situation. (Dagelijks werk, Renate Dorrestein, 2020).

[3] Anarchist and theorist Peter Kropotkin also stresses the power of fiction in his book Russian Literature: Ideals and Realities . Here he argues that fiction can and has completely changed a society. According to Kropotkin, the Russian novelists such as Tolstoi caused the general view of slavery to change, and it was eventually abolished in Russia.

with a human to make an artwork. And depicts how a dog could evaluate such an artwork.

This book is definitively fictitious, but the imaginations at stake are quite similar to the questions the Multispecies Collective that I am part of addresses. In this text, I will discuss these questions, the main difference is that I step outside the realm of fiction. But first I want to make a small remark; this is not a scholarly essay, since I am not a scholar, but an artist. Therefore, the text doesn t strictly follow academic rules and is somewhat loose and playful.



Portrait of Paul Auster

The Multispecies Collective

The Multispecies Collective consists of, amongst potential others, the artists: Olli†, Doris, Eva Meijer, Wiske, Miemel, and me GC Heemskerk (four dogs and two humans). Olli and Doris are two former

street dogs from Romania. They now live together with Eva Meijer in the Netherlands. Wiske is a former street dog from Spain, and Miemel is a former street dog from Dubai. They now live together with me and their other human Kim David Bots. Sometimes the collective comes together to do projects. And sometimes we come together if we simply need each other. Wiske and I, for instance, take care of Doris when Eva must go abroad for a symposium or presentation.

The collective does many different things, such as making dens, crafting sticks, searching for nonhuman artworks in our surroundings, and doing research and writing about non-human art. We don t focus on the end product. Collaboration and the creation process of the dens, sticks, and other works are just as important.

Within the art field there currently is more and more appreciation for collectives. This was, for example, noticeable at the last Documenta exhibition in Kassel (Germany) in 2022. This famous art exhibition takes place every five years. By the time of the last exhibition, many different collectives were invited to take part, invited by the temporary direction called Ruangrupa, a collective from Indonesia.

An important aspect of a collective is that instead of the individual artist is at the centre, the knowledge that is reciprocally exchanged and the support that can be offered to each other is most important. This provides an essential counterweight to the hyper-individual society and art sector and shows how we are always about others and are inherently interdependent.

The others to which humans relate are not merely human. Also, other animals, ecosystems, and the planet decide who we are, in symbolic and material ways, as the climate crisis and the COVID pandemic have recently shown us. The Multispecies Collective takes these relations into account and doesn t perceive them as limitations but as a starting point for new relationships. An important aspect of this is seeing other animals as full-fledged subjects. In the Multispecies

Collective methods are developed to subvert the predominant anthropocentric worldview. The human species isn t necessarily on top of the hierarchy, decisions are taken collaboratively.

We also think about how we can give back. Eva, for example, organizes a working group every year to help in her community by transferring toads and salamanders during the annual toad migrations, and we also donate all profits to charities such as Animal Rights and do fundraisers for cow sanctuary the Leemweg, among others. I recently started helping feral pigeons with their painful stringfoots[4].





Portraits of Wiske, GC, Miemel, Eva, Olli, and Doris

Artworks made by the collective

Parakeet intervention (ongoing project)

I recently discovered holes made by parakeets in the building where my studio is. Instead of seeing those holes as a destruction of

[4] The term stringfoot describes pigeons who have trash entangled around their feet, such as plastic wire, dental floss, human hairs, or other litter caused by humans. This causes a very painful infection, and often the loss of toes or even feet.

the wall of the building and repairing it, I perceive the holes as an improvement of the patriarchal architecture, and I admire this adaptation. I am currently in the process of evoking a collaboration and I hope the parakeets want to participate. I started to archive their work by taking photos of their project, recording the sounds they made when scraping the wall, and trying to establish communication by hanging peanuts out of my window, which they accepted and ate. I don t know yet how this project will evolve.



Parakeet holes and a stick with a sack of peanuts

Miemels installation

In 2022, the Meersoortig Collectief participated in a group exhibition in a studio garden called the Garden of Stars, in The Hague. Miemel came to this garden quite often, because Shani Leseman, the human who fostered her (when she just came to the Netherlands from Dubai where she was a street dog), has her studio here. She worked for a year on three dens, into which she repeatedly placed found objects. One of these objects, a wooden stick, she crafted at different times over three weeks. At the time, Miemel still found many places scary, but in this garden, she felt safe and could unfurl. I made a replica of her

crafted stick by first making a mould and then filling it with aluminium. We presented the two sticks in the dens near her found objects.



Miemel s installation at the Garden of Stars, The Hague[5]

Wiske s dens

One of the first multispecies collaborations I (consciously) participated in was the work I made with Wiske for a group exhibition at Nieuw Dakota Amsterdam in 2018. I had wanted to make something with Wiske for a long time, but I didn't want to force her. I didn't want to assume the traditional role of a master and command her to do something "artistic". Instead, I began to look more consciously at Wiske's daily activities. Wiske is a very quiet and timid being, but at the beach, she comes alive. I noticed that here she digs narrow, shallow dens. Normally, street dogs dig dens to sleep in. Wiske doesn't have to

[5] Source: https://themultispeciescollective.cargo.site/
https://meersoortigcollectief.blogspot.com/

do this; she sleeps in bed with me. She dug these dens for her pleasure. I interpreted the dens as an intervention in the rigid flat landscape. It is a form of land art. For this collaboration, I made plaster casts of these pits. I presented these in the exhibition space, alongside a video showing Wiske's dens and her making process. Another part of the installation was a couch and a rug, to create a space in which Wiske also felt comfortable and could come and visit the exhibition at the less busy moments.



Wiske s installation at Nieuw Dakota, Amsterdam

An important aspect of our joint working method is communication through creating common language games. This method is also based on the research done by Eva. But also, on the work of (amongst others) Sue Donaldson and Will Kymlicka.[6] Like art,

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[6] Donaldson and Kymlicka argue that we should reorganize our society with non-human animals. They advocate for an extended notion of citizenship for animals, suggesting that some animals should be considered co-citizens, while others may be

language has been used as something that would separate the humans from the non-humans. However, research has shown us that many non-human animals have complex languages of their own. Often their languages prove to be more complex than human languages as they use colour and smell, or even change the colour of their skin.

Animal behaviourist Con Slobodchikoff has for example researched the language of prairie dogs. In his research it becomes clear how complex their language is, and how close it is to human language. Often sentences are translatable into English. During his field studies, a prairie dog would describe a human walking in their direction, describing also the speed and colour of their clothes. Furthermore, prairie dog language makes differences in past and present (Slobodchikoff 1980).

Dogs and humans have co-evolved. It is even claimed that as humans and dogs began to coexist, humans gained the ability to develop their spoken language (Haraway 2016). Through living and working together the collective develops their own specific language games.[7] Body postures, smell, touch, and sound are all important

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temporary visitors or residents of their own communities. The relationship between humans and animals, particularly domesticated ones, is characterized as inherently unjust due to coercive confinement and exploitation for human benefit. To rectify this injustice, the authors propose a shift towards relationships of co-citizenship and co-membership, acknowledging the interdependence of all species. They argue against the traditional view of human independence as the highest goal and advocate for recognizing vulnerability and dependency as inherent aspects of life. (Zoopolis 2011)

[7] Kropotkin also argued that the natural world is not a place of survival of the fittest, but of mutual aid. In other words, the world outside the commonwealth is not *solitary, poor, nasty, brutish and short*, but a place where food, knowledge and sources are shared, even among different species. He argued that there is something opposed to the capitalist and individualistic system and that he found examples of this during fieldwork in the Russian steppe, for example, but also among various indigenous peoples. He tells, for instance, about bears that lived together in large groups. Evolutionarily, according to him, there is a motive to cooperate rather than engage in a battle of the strongest. (Mutual Aid: a Factor of Evolution 1902).

factors, but also context plays a large part. I know when Wiske gives me a certain look at a certain place, that I have to assist her in making a resting spot at our new chair next to the window, or when Miemel is scared and needs to be assured. In turn, they know many Dutch words, for example, wacht , which means wait , and oversteken , which means to cross the street. Our common language helps us to listen and support each other in our wishes and frustrations. Together we create daily habits and routines. It helps Miemel and Wiske to survive in a human-dominated world. I listen to them and observe what they want to do (and vice versa), what they want to make, and sometimes help them by providing the preferred material or guide them to the preferred location such as the beach. We do not force each other to make something but try to see what is already there (and is often overlooked).



Portrait of Sue Donaldson

The illustrator is a link in a web of external influences

Beyond my role in the collective, I also have an individual practice in which drawing has a central role. I am interested in drawing because it is quite accessible to do or to look at. As the famous Dutch/Belgian artist Mark Manders once said: when you look at a drawing you travel in time. What he meant by this, was that a drawing is built up in a way you can immediately trace back as a viewer. You can understand how it was made by simply looking at it.[8] Which is much more difficult for metal sculptures, or complex tapestries. In old Greek, there is no distinction between the word for drawing and the word for writing. From a phenomenological perspective, be it drawing, writing, or dancing are all forms of ideas. Which are ontologically on the same level. It is not the implementation or realization of an idea, but the idea itself. This means that there is no hierarchy between these different forms of ideas (Merleau-Ponty 2002).

In my opinion, the drawing process is collaborative, with the illustrator acting as a link in a web of external influences. An example of such an influence is the material you use. The grain of the paper determines to a large extent the way the lines of a drawing are shaped. Drawing has the potential to represent imaginary interpretations of reality, similar to theoretical knowledge. Drawings can function as a form to convey ideas, to create shared images of the interpreted reality. It can also serve as an important form of communication. During our residency at the Pompgemaal in Den Helder (supported by the Mondrian Fund), I made five large map drawings made with locally

[8] Mark Manders, On Drawings, 1998. https://www.markmanders.com/texts/on-drawings

found materials, such as grass and mud. These drawings represented the area of the residency (a small part of the Huisduinen dunes). I depicted the artworks of many non-humans, such as hare paths and a rabbit borough. During the open studio, I showed the visitors these maps. Later I showed them where these nonhuman creations could be found by giving a small tour. Doing this made it diffuse what the artworks were, the drawings inside or the burrows and paths outside? From the perspective of the visitors, the drawings seemed to shift from artwork to an exhibition floor plan, the tour into a performance, and the burrows and paths into the artwork. Meanings can apparently change, and drawings can be a tool in this process.

Not merely humans use drawing as a communication tool (for instance: mathematical figures, maps, traffic signs, medical drawings). In the practice of many bears, scratches on trees also help them to talk to each other (Burst and Pelton 1983). Bears are not so solitary as many people think; through these drawings (but also by scent) they know where the other bears are located and at what time they were there. Humans make similar drawings on trees (arborglyphs), which are used as direction signs, complete maps, or an exclamation of love. In short, material, surroundings, other actors, and emotions are all important links in the illustrators' web. What you make as an artist and how it looks is only partly decided by the maker. You are a part of all kinds of relationships and contexts, the world is a multispecies place, and creating art is a multispecies endeavour.

Maps, corresponding tour, and a hare path (Pompgemaal residency)[9]







[9] Source: Meersoortigcollectief.blogspot.com

Human and bear markings on trees[10]





[10] Sources: https://digital.boisestate.edu/
https://newenglandsnarrowroad.com/2010/10/21/black-bears-leave-their-mark/

The borderline of art

As I said, in ancient Greece there was no distinction between drawing and writing. The meaning of these concepts was different than here in the present-day West. Concepts like drawing, writing, and art are big and vague. It is difficult to delineate and define them and meanings can change through time. *Is there a borderline of art? What fits this category and what does not? And maybe even more important; who may decide so?*

The question of what art is is partly an ontological one. In other words, it is a question of what sort of entity an artwork is. Within the field of art philosophy, the ontological category of artworks is often described as an artifact . Artworks are a strange ontological phenomenon because, first of all, they can take different forms: physical objects, dance, or an edition like a novel. Some seem to be outside of space and time because you cannot easily destroy them since the concept will persist. After all, it is difficult to destroy a symphony, since there will always be new performances of it and thus the work of art continues to exist or will be reactivated. Just as you could interrupt or hinder a blackbird from singing his song, they could perform it again in another place or at another time. Or another blackbird from the same area may sing a song with the same melody and intentions (Hall-Craggs 2008).

Philosopher Amie Thomasson argued that an object, music piece, written story or performance is an artifact, if the maker had a specific intention to make it and/or accepts the final product. According to her, this can be as simple as breaking a branch from a tree (Hilpinen 2011). The ontological status of an artwork is partly imaginary, partly physical. According to Thomasson s ontology of art, many non-human

makings fall into the category of artifact, such as the sharp knives of a bonobo named Kanzi[11], the crafted sticks of Miemel, and the palm cockatoos percussion instruments and music (each cockatoo has his own stick and unique rhythm).



Native American Petroglyph[12]

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[11] Kanzi is a male bonobo renowned for his advanced linguistic abilities and tool usage. He was subject to various studies that demonstrated his linguistic and cognitive capabilities, including his ability to understand and use lexigrams to communicate in human language. Kanzi's exceptional skills include understanding spoken words, creating novel sentences, and using lexigrams to communicate desires and concepts. He has also demonstrated tool-making abilities, such as flaking stone to create sharp edges. Despite limitations in vocalization due to bonobo anatomy, Kanzi communicates effectively through lexigrams and occasionally signs in American Sign Language.

[12] Source: https://www.wisconsinhistory.org/Records/Image/IM71074



Crafted percussion material of the palm cockatoo[13]



Portrait of Amie Thomasson

[13] Source: https://phys.org/news/2023-09-palm-cockatoos-whittle-twigs-drumsticks.html

But we can also address the question on the borderline of art from an art historical angle. Art history is the discipline that researches and describes the history of art. It is an umbrella term for the history of artistic disciplines such as architecture, painting, sculpture, theatre, dance, music and film. Traditionally art historians categorize artworks and decide what fits which genre or movement, such as: outsider art , primitive art , postmodern art , etc. By doing so they create history, decide what should be archived and presented (and how), what was important and what not, what was accepted as art and what not. When I was a student in 2008 The Story of Art by E.H. Gombrich was a must-read art history book for art students throughout the Netherlands, which merely discussed the artwork of one female artist (The French and English versions did not include any female artist). This book was first published in the 50 s. The seemingly objective and neutral task of art historians has been questioned since the 70 s. Feminist and art historian Linda Nochlin has explored in her essay Why Have There Been No Great Women Artists?" the historical and social reasons behind the lack of prominent female artists throughout history (Nochlin 1971). She argues that societal structures, including limited access to education, patronage, and institutional barriers, have hindered women from achieving recognition in the art world. Nochlin challenges the notion that women lack the innate ability to create great art, instead attributing the disparity to systemic inequalities. She calls for a re-evaluation of art history to recognize the contributions of overlooked female artists and to address ongoing gender biases in the art world.

Feminist writers, artists and activists (such as the famous Guerilla Girls) have contributed to change (art) history. Hilma af Klint is now even considered as one of the first abstract painters", according to

LACMA (Los Angeles County Museum of Art).[14] It is good news that women/x are becoming more and more a part of the history of art, but this particular claim is also problematic in my view. After all, what exactly is abstract art? Does it include the geometric patterns of puffer fish, or the petroglyphs made by Native Americans? According to sociologist Sharon Zukin, there is a complex relationship between art and power. In her article "Art in the Arms of Power," she describes how artists and their work are used as propaganda machines for the capitalist state and how subsidies, museums, galleries and project spaces play an important role in this. For instance, by making the artist passive activists. Because their subsidized art makes activist statements, or portrays a progressive ideology, and therefore they no longer feel the need to be truly activistly engaged. And how exhibitions with engaged themes similarly make visitors passive. Because after consuming such an exhibition, they feel they have played their part as active and involved citizens (Zukin 1982).

This shows how changeable and influenceable art history can be, and that claims such as "the first abstract painter" can also be interpreted as marketing tools to increase the monetary value of Hilma's works or divert visitors' attention from real emancipation. Not only female art is now considered modern or postmodern , but also works that in the recent past would be considered primitive , or merely crafts instead of fine art are now perceived as such. For example, the work of the collectives CATPC (artists who work on the former plantation of Unilever, a large food company that also financially supports the Tate Modern) and the Sami Artist Group, and the botanical paintings of Marianne North.

[14] https://www.lacma.org/sites/default/files/reading_room/New%20PDF%20from%20Images%20Output-7compressed3.pdf

In short, art is a propaganda tool that can be used to tell the grand narrative of capitalism, a system primarily focused on production for the sake of production, where every aspect of life becomes increasingly subordinate to the imperative of accumulating capital.[15] Ecofeminist Joni Seager has described the position of women in a capitalist society in the following way:

> *Women are an oppressed class. Our oppression is total, affecting every facet of our lives. We are exploited as sex objects, breeders, domestic servants and cheap labor… We identify the agents of our oppression as men. Male supremacy is the oldest, most basic form of domination. All other forms of exploitation and oppression (racism, capitalism, imperialism, etc.) are extensions of male supremacy.* (Seager 1993)

In my opinion, one can add to the list of examples of oppression the term speciesism. Currently, most non-human animals on earth live in captivity in factory farms. According to philosopher Dinesh Wadiwel, the capitalist system depends on the exploitation of non-human animals in order to generate profit. In the capitalist system, non-human animals are seen only as commodities, and are mistreated and exploited (Wadiwel 2023). They are certainly not seen as possible artists. In my view, they are kept out of the story of art history because, due to big business (such as agriculture, entertainment, cosmetics and the food industry) which for a large part determines the development of art history, it cannot use them as full subjects, but depends on them

[15] The term "grand narrative" or "master narrative" was coined by Jean-François Lyotard in his influential 1979 publication, The Postmodern Condition: A Report on Knowledge. Here, Lyotard encapsulated various emerging perspectives, offering a critique of established institutional and ideological knowledge structures.

for the survival of the grand narrative of capitalism and creating profit for the ones in power.



Portrait of CATPC

Non human artworks

Earlier I argued that not only humans, but non-humans too are capable of creating artworks.[16] Here I was influenced by our collective member Eva Meijer and her PhD thesis Political Animal Voices (Meijer 2017). By reading her work I experienced an ontological shift. I suddenly understood that the distinction between animal and human is constructed and violent, as Jacques Derrida already explained in The Animal That Therefore I Am in 1997. Language, reason, emotion, feeling, art, are all examples of concepts that are used to borderline our

[16] My master thesis The Companion Species as Artist (2018)

human superiority and uniqueness. They are used to justify violence and oppression towards non-human animals (Derrida 2002).

> *And this domination is exercised as much through an infinite violence, indeed, through the boundless wrong that we inflict on animals, as through the forms of protest that at bottom share the axioms and founding concepts in whose name the violence is exercised…* (Derrida 2002, p. 89)

After experiencing this shift, I started to perceive non-human animals as full fledged subjects and their creations as possible artworks. In other words, I didn t want to upfront exclude all non-human animals from being able to intentionally create something aesthetically. I started to search for these creations. The first creations I stumbled upon were: beaver dams, bird songs and dances, and spiderwebs. Many of these creations have been a major inspiration for human artworks, think of modern dances and architectural constructions. Art historian Jessica Ullrich argues in her article Jedes Tier ist ein Künstelerin , that from a Darwinian perspective, all lifeforms are inherently aesthetic beings. Due to evolution they all have a feeling of composition, color and rhythm (Ullrich 2015). Think of the dances of bees and the attraction of colorful flowers, or the bowers of the bower birds, and the geometrical patterns in the sand of the pufferfish.

When you search for or look at non-human creations it is important to realize that we as humans have an anthropocentric normative framework, which is also culturally influenced. In the Western world, humans mostly focus on image and sound. While for others smell, touch, and taste are more important. Our normative aesthetic framework is not the only one. What we find appealing does not appeal to others. This makes sense since many of the artworks were

not made for humans to appreciate. There are many sounds non-human animals make we can t even hear, many smells we can t smell, and many colors we can t even see, which -for example- starlings do see.[17] As Mr. Bones explained, dogs perceive the world differently, possibly as a symphony of smells. The way you recognise and appreciate an artwork depends on your species, culture, and individual normative framework.

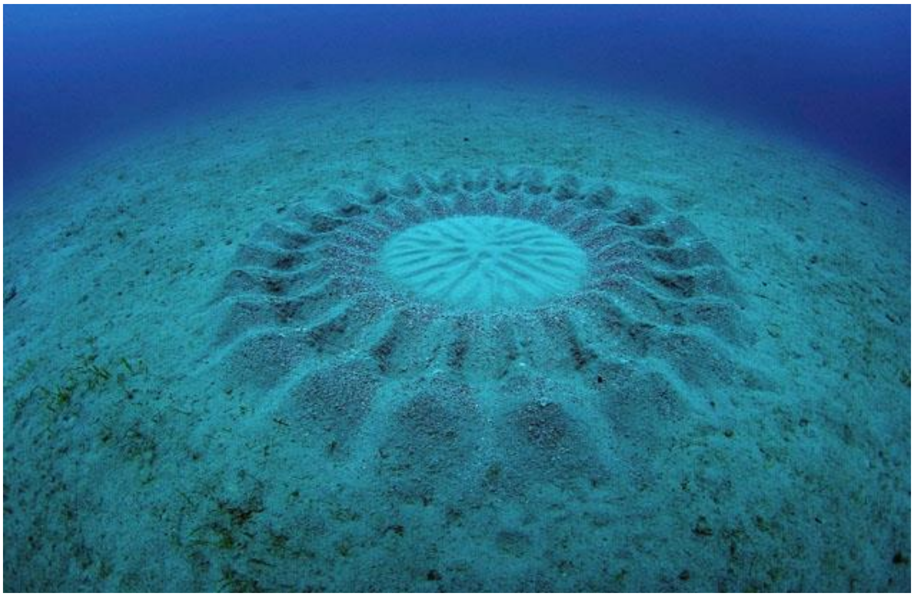


Portrait of a group of starlings

[17] Karen Bakker argues that from an evolutionary perspective it is convenient to have a secret language, so that predators are unable to hear you and so that everything and everyone doesn't talk mixed up and the world becomes one big unintelligible radio where all the stations come through the amplifier at the same time (The Sounds of Life 2022).



Portrait of Laika, Jessica and Kitty Ullrich



Geometrical pattern made by a pufferfish[18]

[18] Source: https://japanupclose.web-japan.org/culture/c20150813_3.html

Spiderweb

In short, the Multispecies Collective does acknowledge artworks that are not made by human beings. We perceive the world as a multispecies place, where we are always interdependent on others. Within our practice, humans are not the superior ones. Through common language games and a shared context, we try to understand each other and doing so enriches our normative aesthetic framework. From a philosophical perspective, non-human artworks have the same ontological status as human art and although within art history their work is not accepted, in time this could change.

What the concept of art exactly is will always remain blurry. I believe it cannot have a rigid definition because, like any other concept, its meaning depends on context. Conversation partners must have a similar idea of what a concept can mean and make similar associations and connections. The time and place where the conversation takes place also influence this. According to philosopher Ludwig Wittgenstein, we should not look for the essential core of a word's meaning but instead travel along with its use through an intricate network of similarities that overlap and intersect. He believes that you cannot demarcate a concept and that different uses of a word can coexist simultaneously (Biletzki, Anat, and Anat Matar 2023).

By being part of the Multispecies Collective I hope to contribute to a general ontological shift, in which we no longer perceive non-human animals and humans as two distinct categories, but instead see non-human beings as self-standing individuals who have their own personality. I also hope that by writing about non-human animals and art, showing their work, and collaborating with non-human individuals I contribute to enriching the associations and connections people have when talking about art. For the individual artist, this can be a big and important difference in their life. Because instead of

destroying a spider's web, this could allow you to let it hang and even admire its beauty.

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Did anyone ask the cats? Speculating on the potential of speculative fiction to explore the feline perspective

Kristine Hill *

Abstract

This paper discusses the challenges I experienced while attempting to gain insight into the feline perspectives on human opinions and discourses surrounding the 'indoor versus outdoor cat' debate and their right to roam. From a thematic discourse analysis of online comments and survey responses, it became apparent that many people believe they know what is 'best for cats', using phrases such as 'a life in prison is no life' and 'if you loved your cats, you'd keep them inside.' Most notable was how these beliefs are invariably formed from generalised perceptions of an entire species. Individuals and unique circumstances are often overlooked. Grounded in the knowledge of individual cats, derived from case studies comprised of eight multispecies families and two examples of relationships formed with roaming cats, I have attempted to speculate on the different perspectives some of these cats might have regarding roaming and confinement. Originally defined as a literary super-genre, 'speculative fiction' asks the question, 'What if?' I experimented with 'speculative fiction' as a research method and asked, what if I could look through the feline lens and translate that perspective to other humans? This approach proved insightful in terms of informing my reflexive praxis. Rather than revealing 'truths', speculative fiction generates new questions and challenges normative assumptions. This essay explores the caveats, pitfalls, and challenges I experienced, as well as the insights I gained from my first attempt at using speculative fiction as a research method.

Keywords

speculative fiction, Felis catus, free-roaming cats, biographical analysis, more-than-human biographies

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Introduction

Through thematic discourse analysis of online comments, responding to articles or media associated with roaming cats (*Felis catus*), followed by analysis of biographies reconstructed from case studies of cat-human relationships, my doctoral research explored the dynamics of cat-human relations and discourses surrounding roaming cats (Hill 2023). Emerging themes were examined within existing theoretical frameworks related to animal agency and guardianship (Hill 2024a), moral panic theory (Hill 2022), language, power, and ferality (Hill et al. 2022), biopolitics (Hill *under review*-a), and interspecies intersubjectivity (Hill *under review*-b). By looking at how guardians related to their cats, under the framework of 'pet parenting styles' I demonstrated how companion cats are perceived on a spectrum from a helpless dependent – or 'fur baby' – who is likened to a small child, to an independent adult being who should be permitted to come and go as they please (Hill 2024a). A discourse analysis of the indoor-outdoor cat debate, from a feline welfare or wellbeing perspective, demonstrated how many people believe they know what is 'best for cats', using phrases such as 'a life in prison is no life' and 'if you loved your cats, you'd keep them inside' (Hill 2023, 2024a). Most notable was how many of these beliefs were formed from generalised perceptions of an entire species, and individuals and unique circumstances were often overlooked.

Case study analysis, and subsequent analysis of reconstructed feline biographies enabled some empirical consideration of individual feline perspectives (Hill 2023). Although derived from the human perspective, these accounts provide insight into how both humans and cats built meaning and mutual understanding (Hill *under review-b*). Could reconstructed biographies also be used to inform considerations of what the feline perspective *might* be on various issues, such as whether cats should roam freely or not? Such an approach would

engage with the concept of 'speculative fiction' as a research method (De Smedt & De Cruz 2015; Galloway & Caudwell 2018; Heise 2016). Speculating on a scenario resulting from a 'what if?' premise is central to both literature and philosophical thought experiments (De Smedt & De Cruz 2015). For example, what if I could understand 'cat' and translate it to 'human' – what would the feline perspective tell us? This is something I had initially planned to pursue as part of my doctoral studies. However, the challenge proved too great, and beyond the scope of a single thesis (but something I plan to pursue in the future). Furthermore, despite the potential (which I am not abandoning), I encountered several caveats, challenges, and pitfalls to such an approach that I will discuss here.

Reconstruction and Analysis of Feline Biographies

More-than-human biographies

As a form of writing, the biography predates biographic research methods (Meister 2018; Snowman 2014). Oftentimes biographies are written to glorify, and less often vilify the subject, which is something that historians constantly grapple with (Meister 2018). A biography can reveal more about the culture of the dominant members of a society and who they considered important, than the lived experiences of an individual. The voices of slaves and women in patriarchal societies, for example, were suppressed and their lives deemed too unimportant to record at the time. In biographical analyses, researchers are 'concerned not only with the biographical self-definitions of individuals but also with definitions ascribed by other people' (Rosenthal 2018, p. 164). In this respect, biographical analysis can be extended to include individuals featured in the accounts of others, including other-than-human animals who were not the focus of said account or biography (Fudge 2022; Krebber & Roscher 2018). Despite being excluded from scholarly collections, and despite the attempts by scientific approaches

to standardise, de-individualise, and autonomise the behaviour of animals, human history is enriched with a plethora of records of the exceptional lives lived by other-than-human animals (discussed by Fudge 2004, 2022). While many of these are not complete life stories that were intentionally written as biographies, they do provide insight into the lives of animals who made an impact within various human cultures. For example, we have Bucephalus, the famous horse of *Alexander the Great* (Trentin & Sneed 2018), *Greyfriars Bobby*, a dog who guarded the grave of his human for over a decade (Johnson 2013), *Cher Ami*, the wounded carrier pigeon who saved U.S. troops in World War I (Milivojevic 2019), and *Ham*, the first chimpanzee in space (Betz 2020; Fudge 2002).

Animal biographies written in the first person are often literary pieces intended to entertain and/or hold a mirror to human society, including how we (mis)treat other-than-human animals (Hansen 2012; Milne 2012). For example, the novel *Black Beauty* (Sewell 1877) is written as a fictional autobiographical account of a horse, and the narrative sheds light on the inhumane treatment of working animals and inequality in nineteenth-century England (Hansen 2012). Flegel (2012) discussed how the animal autobiographical style of fiction, popular in the nineteenth century, had a higher rate of female authors and could be interpreted as allegories of female oppression in patriarchy. It has been proposed that Anna Sewell, author of *Black Beauty*, may have been guided by her own experiences of oppression as a woman with disabilities in understanding the harsh realities of other-than-human animals living in a human-dominated world (Flegel 2012). The case studies featured in my thesis were used to reconstruct feline biographies to gain insight into the cat's life experiences (Hill 2023). However, my access to, interpretation, presentation, and analysis of the feline biographies are unavoidably subject to my positionality as both a researcher and cat-lover. Much as I may

endeavour not to embellish or over-interpret the data, the biographies themselves may reveal as much about the researcher as they do the cat (or the human interviewee). This is only problematic if not fully acknowledged or incorporated into a reflexive praxis that informs any analysis.

Biographical reconstruction from case-study interviews

The final two empirical chapters of my PhD thesis were centred on biographical reconstructions, based on case-study interviews and supplementary correspondences with the cat guardians or friends (Hill 2023). The case studies are described in detail elsewhere (Hill 2023), but briefly, these comprised of an unstructured interview (25-80 minutes in length) conducted via video chat, ongoing electronic exchanges (email or text), and shared photos and videos. Events were remembered and shared at different points during the interviews, and in many cases, the participants jumped back and forth from kittenhood to the present day. The first stage of biographical reconstruction involved restructuring the interview transcripts according to a linear timeline (Hill 2023, pp. 380–385). By concurrently coding the interviews with chronological tags, I was able to reorder the transcripts and view them as a linear account of the cats' lives. I then wrote out a third-person account of key elements of the cat's life history. This approach complemented the thematic discourse analysis and allowed a biographical account to be re-constructed (Hill 2023, pp. 367–376).

Table 1. Overview of case studies and biographical synopsis[1]

Human acronym	Human status	Cat names	Notes
MiH	Guardian	Mimi	A free-living country cat who was unsocialised but had some health issues when he first started (tentatively) interacting with his human. Mimi became an indoor cat as he grew older, and the interview covered the last 7 years of his life.
FKH	Guardian	Fantastic Kapow	Former free-living (unsocialised) siblings who were adopted at around 9 months of age. Both cats go out roaming and have lived with FKH for 8 years.
CH	Guardian	Conkey	Conkey was a former street cat/stray who was adopted by CH 5 years ago. He goes out roaming on a regular schedule (the other cats in the household stay indoors).
PALH	Guardian	Prr Apollo Luka	Prr was adopted as an adult cat who supposedly went out, chose to stay inside. He was adopted at around age 3 and had been with PALH for 4 years. Apollo was adopted as a kitten shortly after Prr joined the family and has never been intentionally let out. Luka was a stray who moved himself a few months prior to the interview.
PH	Guardian	Phoebe	Phoebe was adopted as a young adult cat and has lived in a single cat household for 2 years. She goes out but is afraid of the neighbourhood cats and does not venture far.
MH	Guardian	Memphis Tambo	MH's account of Memphis' life spans a 14-year period from when she first met him at around 4-5 weeks of age.

[1]* Full synopsises of the case studies and biographical reconstructions can be retrieved from my PhD thesis (Hill, 2023, pp. 367–376, 380–385).

			Tambo joined the family as a kitten a few years later.
SF	Friend	Sam	Sam is the neighbour's cat who has been visiting SF and her mother almost daily for >10 years.
MF	Friend	Morgen	Morgen is a neighbourhood cat who has been visiting MF and her partner in their bungalow on a semi-regular basis since they moved in a year ago.

Biographical analysis and research

I attempted to interpret the biographies from a feline perspective, while recognising that much of this would be speculative. Bornat (2012, p. 343) attributed the biographical approach with the potential to promote 'understanding and interpretation of experience across national, cultural and traditional boundaries to better understand individual action and engagement in society.' The biography is a social construct, comprising both social context and the subjects' perceived experience of that world. In my research I strived towards interpretation across species boundaries in reconstructing and analysing more-than-human biographies (Hill 2023). Broadly speaking, the biographical approach to research entails reconstructing life histories from a diversity of sources in order to interpret them according to a specific set of criteria relevant to the research question (Rosenthal 2004). In my research I was concerned primarily with understanding how individual cats might feel about human notions of protection and guardianship in relation to unsupervised roaming. I followed a biographical interpretive method that focuses more on interpretations of motivation and meaning and takes a phenomenological approach to understand the individual within a defined structural context (Bornat 2012; Rosenthal 2004; Wengraf 2001). This method adopts a phenomenological approach to understanding biographical data and 'focuses on the individual's

perspective within an observable and knowable historical and structural context' (Bornat 2012, p. 346).

Whose story is it anyway?

An important consideration is that the interviews I used to reconstruct feline biographies are an oral recounting of a life-history taken at a fixed point in time. Rosenthal (1993 p. 59) asked 'to what extent is one receiving an account of an "actual" life history, and to what extent is one being presented with the autobiographer's present construction of his or her past, present, and future life?' Although specifically referring to autobiographical accounts, similar issues arise regarding biographies reconstructed from third party sources. For my research the question became 'to what extent is one being presented with the biographer's construction of the cat's past, present, and future life?' This is in part addressed by the 'biographic narrative interpretive analysis' method, which entails disentangling the chronological story from the experiences and meanings provided by the interviewee (Bornat 2012; Rosenthal 1993; Wengraf 2001). As such the biographical interview is understood as a process 'in which movement between past, present and future is constant and in which the interviewee may not be fully aware of the contexts and influences in their life' (Bornat 2012, p. 346).

Whose story is it anyway? This was a central question addressed by Gelsthorpe (2007 p. 515) who stressed 'that personal reflexivity on the part of the researcher (or what elsewhere is described as a psychosocial approach) is critical to an understanding of research.' Gelsthorpe (2007) was concerned with addressing how the researcher influences the telling of their subject's story, but a similar approach can be applied to disentangle the cat's story from that of the human narrator. Namely, via a close examination of the discourses and a recognition that stories are entwined and subjective. Biographical and

discourse analysis have been combined using a methodology that acknowledges that biographies are structured by discourses (Pohn-Lauggas 2017). This approach was particularly relevant to my research because it recognises that social worlds are co-created. The human narrative provided a biographical window into the cats' lives but will inherently over-emphasise the role that person played in constructing the cats' social world.

Scholarly other-than-human animal biographies are not intended to construct their lives in (auto)biographical terms as if they spoke, thought, and felt like humans (Fudge 2004; Harel 2012). A consequence of writing in the third person is that 'animal biographies remain external to the cognitive experience of the animals' worlds and their relations to others (Krebber & Roscher 2018, p. 2). Nonetheless, 'animal biography responds to and tries to capture our experience of other animals as individuals, with their own personalities, idiosyncrasies and each and every one with a self of its own, as well as our desire to lend voice and recognition to these individual creatures' (Krebber & Roscher 2018, p. 2). Imagining the perspective of other animals presents significant challenges, and when 'speaking for others', there is always the danger of misrepresentation. Armbruster (2012, p. 22) warned that 'any text that gives voice to a nonhuman animal is a case of speaking for others, a mode of discourse that has been extensively examined and debated within feminist (and postcolonial) theory and criticism.' Fudge (2008) was critical of how speaking animals in literature and film often tell us what we want to hear, and particularly regarding relationships with companion animals, humans tend to make assumptions based upon what they themselves would think or feel in each situation. This in part can be remedied by listening and attempting to understand what the animal other is communicating. Fudge (2002) used the example of Ham, a chimpanzee sent into space in 1961, and how his facial expression in a famous photo was widely

(mis)interpreted as a smile. However, anyone familiar with chimpanzee body-language understands the teeth-barring facial expression as a gesture of aggression or fear. This is a strong argument in favour of incorporating elements of animal behaviour into biographic reconstruction and analysis. To this end, I employed elements of narrative ethology (McHugh 1999, 2011) and philosophical ethology (Despret 2015) to aid my interpretation. Narrative ethology utilises species-specific notions of language and communication to configure a non-anthropocentric understanding of interspecific languages (McHugh, 1999, 2011). Complimentary to this approach, philosophical ethology focuses on human animality, rather than human exceptionalism, to understand motr-than-human experiences (Buchanan, et al. 2014; Bussolini 2013; Despret 2015).

Thinking like the animal I am

A problem with reconstructing feline biographies is that humans can only think and describe others using a human understanding of the world. Anthropomorphism – assigning human attributes to other-than-human entities - is unavoidable. However, much of what we might consider 'human' is not exclusively human. Emotions and sensual and cognitive experiences of the world are shared to varying degrees among other species, and I attempted to focus on this shared animality. In principle I favour egomorphism, which prescribes using our personal experiences to understand others, regardless of their species (Milton 2005). However, the reality is the biographies are anthropomorphic, and how much I truly understand of the feline condition was not measurable. When writing and interpretating a human biography, it is often possible to consult with humans who have shared similar experiences to the subject. However, no cat can ever read or challenge the interpretations of these biographies. This

remains a problem for anyone who attempts to 'give a voice' to animal others.

In *The Animal That Therefore I Am*, a translation of Jacques Derrida's 1997 lecture, Derrida (2008, p. 34) explained the 'animal question' has always been present in his writing in one form or another. Derrida (2008) is concerned with how cultural representation of other-than-human animals influences human attitudes towards real-life animals. Derrida (2008 p. 157) described how anthropomorphism can be a kind of comparative analysis, whereby the human is transposed onto the animal. This transposition can be anthropocentrically motivated, but anthropomorphism is not inherently anthropocentric. Both anthropomorphism and anthropocentrism are human-centred, but the former because it uses human language to understand animal others and the latter because it grants humans greater intrinsic moral worth. McHugh (1999) used Derrida's separation between anthropocentrism and anthropomorphism as a central tenet of narrative ethology. Anthropocentrism refers to 'the ordering of the world under the sign of the human' whereas anthropomorphism can be a means to understand the other-than-human that is not inherently anthropocentric (McHugh 1999, p. 4). Narrative ethology also requires an element of self-reflexivity in anthropomorphic interpretations that acknowledges but does not supress the human context (McHugh 1999, 2011). As a methodology, narrative ethology reconfigures anthropomorphism as 'a mode of mutually identifying the animal and the human' and focuses on repositioning the human within the world of the animal other (McHugh 1999, p. 5). The human is no longer centre stage but viewed as a co-creator within a shared and intersubjective social world. However, as the author I remain sceptical of how much co-creation is truly possible in other-than-human biographical research.

Speculative fiction as a research method

The feline biographies I reconstructed using a series of case-study interviews (Hill 2023; summarised in Table 1) were already somewhat speculative. Next, I attempted to take this speculation a step further and imagine how these individual cats might respond if I could interview them and they could speak 'human'.

As a literary term, speculative fiction encompasses a super-genre of fiction about persons, places, histories, or futures that do not exist (Heinlein 2017; Oziewicz 2017). It might also be considered a field of cultural production, and in this sense speculative fiction is not limited to any specific literary techniques (Gill 2018; Oziewicz 2017). Speculative fiction asks questions, and often the question is, 'what if?' For example, 'what if a third world war was imminent? (e.g., the Novel, *Never* by Ken Follet, 2021, and many others). Or 'What if aliens invaded Earth?' (e.g., H. G. Wells' 1898 novel, *War of the Worlds*, or the 1996 blockbuster, *Independence Day*). Oziewicz (2017 p. 18) asserted that 'speculative fiction rejects the "science for the West, myth for the rest" mindset informing traditional Western non-mimetic genres—especially fantasy and science fiction, with their often colonialist and imperialist visions of spiritual or technological (con)quests.' Speculative fiction can serve as a means to 'share and reclaim forgotten or marginalized modes of engagement with reality' (Oziewicz 2017, p. 19). Ferrández-Sanmiguel (2022) suggested that speculative fiction might also prove to be an important medium for rethinking human-animal relations and countering anthropocentrism. Like posthumanism and critical animal studies, speculative fiction is 'interested in foundational questions about the nature of human and nonhuman existence' and is 'concerned with the construction of otherness and with what it means for subjects to be positioned as others' (Ferrández-Sanmiguel 2022, p. 4). Ferrández-Sanmiguel (2022)

demonstrated this concept with an analysis of two literary texts featuring catastrophe narratives to explore how a focus on disaster can destabilise the human-animal binary. Similarly, presenting a 'humanised' version of a plausible other-than-human narrative might help challenge inherent anthropocentrism.

From biographies to speculative fiction: Speculation and fabulation from feline stories

In literature, fabulation is the act of inventing or relating false or fantastic tales. Giving a human voice to a cat is an act of fabulation. Cats cannot read or write complex English prose because their brains do not have the same capacity for language as humans (Paul, et al. 2020). That does not mean cats cannot understand or communicate with humans, but simply that cats do not speak or think in the same linguistic fashion. However, my intention was never to delude the reader into believing my invented narratives are what the cats would think if they could think like humans. Rather, I endeavoured to envision a feline perspective and to translate that into something that could be used to challenge the anthropocentric discourses I had encountered surrounding roaming cats (Hill 2022, 2024a).

Haraway (2016, p. 10) built on a concept of 'speculative fabulations' that include speculative fiction (science fiction/fantasy), situated feminisms, string figures (experimenting with patterns and *possible* connections), and speculative philosophy. Haraway (2016) believes science fiction and science fact need each other, and that stories are fundamental tools for discovering new ways of thinking, being, and caring in a multispecies world. I attempted to use speculative fiction to explore what the cats in my study *might* be feeling and thinking, and how human actions or interactions *might* affect them. I assumed that cats possess the capacity to experience the same basic emotions as humans – love, fear, happiness, sadness, contentment,

boredom, etc. And while they might not experience these emotions in the same way as humans, science backs up the assertion that as sentient beings, cats can and do think and feel (Paul, et al. 2020).

A key difference between anthropomorphism and egomorphism is that the former implies 'attributing' (or superimposing) something, whereas the latter is about 'perceiving' some relatable quality (Milton 2005). Although I strive to recognise a shared animality (via a philosophical ethology lens), the approach I took to analysing reconstructive feline biographies is arguably more about attributing than perceiving. Regardless of how it is defined, I believe the practice of acknowledging that other-than-human perspectives exist and matter, even if we can only speculate what these perspectives might be, is an important step towards multispecies coexistence. Furthermore, narrative ethology (McHugh 1999, 2011), an approach I adopted for the first round of biographical analysis, utilised anthropomorphic interpretations (Hill 2023). In this respect, speculative fiction stretched my anthropomorphic interpretation further still as I (cautiously) attempted to envision the feline perspective and how they might respond to points of contention regarding either living exclusively indoors or roaming unaccompanied. To this end, I experimented with speculative fiction as a research tool to present *possible* feline perspectives on their umwelt and relations to humans. I speculated on the question, *if* I was able to comprehend the feline perspective, how might it translate into something a human might say or understand? I used an invented first-person narrative for each of the cats, who were responding to a fictional interview question (see examples below).

Experimenting with speculative fiction

The first questions I sought to address concerned the 'indoor versus outdoor cat' debate. From a discourse analysis of user

comments responding to articles about roaming cats, I previously demonstrated that humans tend to view cats on a spectrum from being wholly dependent, much like a small child, to a wild or wild-like creature who should be treated as a free-agent (Hill 2024a). Generalisations claiming cats need to roam to live a full life were common, as was the sentiment that guardians have a duty to protect cats and prevent them from causing mischief or decimating wildlife (Crowley, et al. 2020a; Hill 2024a). Just like humans, cats exhibit a wide range of different personalities, needs, and preferences, based in part on their biological inheritance, and in part on past experiences and their current environment or circumstances (Bradshaw 2016; Crowley, et al. 2020b; Finka 2022; Salonen, et al. 2019). What is good for one person (human or feline) may be undesirable, or even damaging to another.

One comment in my datasets reads 'I can't stand people that force their cats to stay inside', and the notion that confining cats was cruel was a prominent theme, often accompanied by an imprisonment analogy (Hill 2023, p. 99). Three cats featured in my case studies, Prr, Luka, and Apollo (Hill 2023; Table 1), all live in the same house. Prr has never expressed an interest in going out, despite being adopted as a cat who supposedly was let out by his previous guardians. At the time his guardians had wanted a cat who went out. However, his guardians soon learned that Prr was terrified of the outdoors and every time they put him out, he would immediately try and get back in again. If the door was shut, he would run into the garden shed and hide there (Hill 2023, p. 274). How might Prr respond to the idea that cats should go outside? Perhaps he would respond:

> *'I remember when I first came to live here. My new humans threw me outside. Why would anyone do that to a cat? It's big and scary out there! Thankfully they have ceased doing that and I feel a lot safer'* (Imaginary response from Prr).

Neither does Luka express any desire to leave the house, despite having lived for some time on the streets before joining Prr and Apollo in their multispecies household (Hill 2023; Table 1). His human says you can leave the door open, and Luka does not venture out (Hill 2023, p. 274). Luka might draw from his negative experience of being on the streets, especially as he was not in great shape when he first showed up at the door. Conversely, Apollo does show an interest in going outdoors, despite never having been intentionally let outside (Hill 2023). Prr was already an indoor cat by his own choice, and when Apollo was adopted as a kitten the family had moved into a house near a busy road. However, of the three cats in his household, Apollo is the one most curious to go out and even escaped one time for a few hours of adventure (Hill 2023, p. 275). Apollo might say something like:

> *'What is on the other side of that door that the humans venture into? I want to know. I am an explorer. I am not afraid of anything'* (Imaginary response from Apollo).

The above speculative paragraph is not meant to imply that Apollo is unhappy being kept inside, but that he might need more stimulation and enrichment to keep him content. This point is central to using speculative fiction responsibly. Someone more inclined to believe all cats deserve to roam may over-empathise Apollo's discontentment, and vice versa. However, the practice of speculating such responses should inform self-reflection, not confirm inherent researcher biases.

The opposite of the 'confinement is imprisonment' theme that emerged from my previous study was the notion that it was irresponsible to let your cat roam and that people who let their cats out did not care about their safety (Hill 2024a). Similar themes were also prominent within the case study interviews (Hill 2023). For example,

the notion that a 'good cat guardian' will keep their cats inside came from a neighbour of Conkey's who asked his human if he had escaped. The other cats living with Conkey in the multispecies household were apparently content to be apartment cats. However, according to his human, Conkey had expressed a desire to go out roaming and his human had facilitated this (Hill 2023). Conkey might interject with a retort to the question 'Did your cat escape?':

> *'Am I a prisoner? No, I am just a cat going about his business, visiting friends, and exploring. I was free-living for a long time, and I know how to look after myself!'* (Imaginary response from Conkey).

Memphis's human said she once came home to find a note pinned to their front door saying something along the lines of 'Keep your cat inside or else!' (Hill 2023, p. 260). Memphis has been roaming and visiting the neighbours all his life and probably has made more friends than enemies. It is not clear what this person had against Memphis, but the threat upset his human greatly (Hill 2023). Memphis might respond to the note:

> *'This is my neighbourhood. I live here too. What gives you the right to threaten my safety and cause my human distress? What harm did I do to you?'* (Imaginary response from Memphis).

Memphis is an example of a cat for whom confinement would take away a large part of his social life (Hill 2023). A couple of other cats in my case studies have befriended humans outside of their homes and established long-term friendships with humans who are not their guardians. For these cats, and especially while they are fit and healthy, it would be hard for me to imagine they would ever be content to stay inside.

Knowing others?

I cautiously shared some illustrative examples of imaginary feline responses above but am self-conscious about how fanciful and lacking in scientific rigour they appear. When it comes to describing and understanding more-than-human minds, human language is clearly insufficient. While anthropomorphism *can* be a valuable tool for understanding other-than-human animals, caution must be taken when using it to interpret other-than-human experiences (Hediger 2012; Lulka 2008; Root-Bernstein, et al. 2013). Root-Bernstein et al. (2013) recognised a spectrum of anthropomorphism with the stronger forms including cartoon animals engaging in human-like behaviours, such as reading a book, wearing a suit, or going to school, which can lead to misrepresentation and misunderstanding of other-than-human animal behaviours and emotions. What Root-Bernstein et al. (2013) defined as 'weaker' forms of anthropomorphism recognise similarities, but do not superimpose over-humanised characteristics, which they argue can be a useful tool to promote awareness and empathy for the plight of other-than-human animals. As humans, we understand the world around us in human terms, using thoughts and emotions we can relate to (Lulka 2008). In this respect, some degree of anthropomorphism is unavoidable. However, Milton (2005) asserted that the 'self' (ego) perceives other animals (including other humans) and proffered the concept of 'egomorphism' to explain how personal experience is the primary point of reference for understanding both humans and other animals. Essentially anthropomorphism can be thought of as attributing human characteristics to other-than-human entities, and egomorphism as using our personal experiences as a human to understand others. Returning to the example of *Black Beauty* (Sewell 1877) it could be argued that Anna Sewell was using her experience as a woman with a disabling illness to understand the plight of a nineteenth-century horse, or (inadvertently?) using the

horse to tell a human story of oppression in a patriarchal society. The difference is subtle but important, and I believe anthropomorphic interpretations can be valuable, providing they are recognised as such.

Amongst human groups, 'the belief that we can know the intentions, goals, and desires of other-selves allows us to act in this world' (Kohn 2007, p. 7). This does not mean we need to know exactly what the other thinks or feels, just that we believe it possible to relate, empathise, and can subjectively interact using shared meanings. The same principle can be applied to inferring what other-than-human animals might be experiencing or attempting to communicate. Speculative fiction holds the potential to challenge anthropocentric thinking by asking readers to imagine what other-than-human animals might think, feel, or experience by speculating on 'what if other-than-human animals could speak our language?' Haraway (2016) suggests that fiction is fundamental to discovering new ways of thinking and knowing by probing the boundaries of science and knowledge.

Speculative fiction: a multifunctional tool

As acknowledged previously, the writing of the biographies themselves revealed much about myself as a researcher. This will be even more so in the above examples of my imaginary responses from the individual cats. By dropping the pretence of being factual or accurate, speculative fiction can be used to interrogate normative notions about reality (Oziewicz 2017). While anthropomorphism can be an invaluable tool, reflexive praxis is necessary to circumvent or minimise the potential pitfalls of attributing human characteristics (and ways of thinking) to other-than-human entities.

Speculative fiction as reflexive practice?

Both positionality and reflexivity are important elements of qualitative research, and necessary for ensuring robustness (Chiseri-

Strater 1996; Holmes 2020; Madden 2010). Positionality refers to the knowledge, experiences, and beliefs of the researcher about how this influences the research process (Bourke 2014; Holmes 2020; Robinson & Wilson 2022). The nature of qualitative social research means it is never value-free, and as such must account for the researcher's motivations, their core beliefs, and assumptions, and disclose any inherent bias (Robinson & Wilson 2022). The position statement I incorporated into my PhD thesis provided an opportunity to reflect upon the research design, context, and processes of my research (Hill 2023, p. 18). I am pro-cat in the sense that I love individual members of the species and feel an affinity towards the species as a whole. However, I remain internally conflicted about restricting cats' freedom to explore unaccompanied. I confess to a romanticised ideal of a cat roaming her neighbourhood, chasing butterflies, and basking in the sun, before returning home for dinner and snuggles by the fireplace. The positionality statement enables the researcher to question their assumptions, problematise the chosen methodological and analytical approaches, and seek strategies that address these (Robinson & Wilson 2022). This forms the basis for applying a reflexive praxis to the research. Reflexivity is the ongoing process of self-examination, whereby judgements and practices are critically evaluated in terms of how they might influence the research or conclusions drawn (Mosselson 2010; Tisdall, et al. 2008). My cats have always been indoor cats, and even prior to embarking on my academic journey I questioned my right to restrict their freedom. This was especially so every time I encountered a carefree cat out, and it became more apparent when I began experimenting with speculative fiction.

Reflexivity is the deliberate and systematic reflection of how the researcher influences the research, their participants, their social world, the knowledge produced, and themselves as researchers and persons (Blaisdell 2015; Mosselson 2010; Tisdall, et al. 2008). The

reflexive process can be made more robust by considering 1) reflexivity as introspection (probing personal experiences), 2) intersubjective reflection (emotional experience and how researchers and subjects influence each other), and 3) reflexivity as a social critique (whereby the researcher 'foregrounds tensions around power, voice, and silence between researcher and participants') (Blaisdell 2015, p. 85). Breaking the process into distinct aspects enables a more systematic approach to a reflexive praxis that builds upon standard ethnographic practices such as adding 'margin notes' to fieldnotes and writing up personal accounts of relevant events and interactions. As my interactions with research participants were limited to interviews that encouraged the interviewee to 'tell their story', intersubjective reflection was limited in my research. Furthermore, direct interaction with the feline partners in the case studies was absent. However, I noted that with some human participants, I was more able to establish a rapport, and on occasion engaged in post-interview chats about cats and my research. In this respect, I was influencing my participants, although outside of the research process. Reflexivity as introspection was important as it related to how I was interpreting and presenting my research subjects in my academic writing, especially the feline subjects. Applying reflexivity as social critique further highlighted the power imbalance between not only the researcher and the feline subjects, but also how the cat's stories were subject to the narrative interpretation of their human guardian. Reading over my preliminary attempts at using speculative fiction to explore the feline perspective, I became acutely aware of this. When I embarked upon my doctoral research, I was adamant that I wanted to bring the feline perspective to the forefront. Although I did not achieve this, I believe the process of endeavouring (and failing?) to understand the feline perspective expanded my intellectual boundaries beyond the limitations imposed by my training in the natural sciences.

Philosophical thought experiments

While the ontologies of many cultures do not ascribe to the human-animal divide, the practice of attributing other-than-human animals with human voices is largely restricted to fantasy and fiction in Western culture (Boglioli 2015; Oziewicz 2017; Roothaan 2019). The notion of bringing fiction into academic research is something that was alien to me. However, I now agree with Haraway (2016) that science fiction and science fact are complementary tools necessary for discovering new ways of thinking, knowing, and being. Oziewicz (2017) identified two universal qualities of speculative fiction. Namely that it 1) interrogates normative notions about reality and 2), drops any pretence of being factual or accurate. This makes for great entertainment, but the applicability to real life – via allegory, possibility, or parallel reality – helps us think. For example, Michael Crichton's novel *Jurassic Park* (1990), and the subsequent film adaptation directed by Steven Spielberg (1993), make us think about 'what if we could clone and resurrect dinosaurs?' Written at a time when the potential of cloning extinct species was becoming a scientific possibility, the novel was intended as a cautionary tale of genetic engineering left unchecked. *Jurassic Park* engages with scientific possibility and presents a plausible scenario of what might happen if the genetic technology to bring to life dinosaurs existed in a capitalist society. In essence, the premise of speculative fiction is 'Just suppose —' and asks 'What would happen if —' (Heinlein 2017, p. 19). It does not need to be completely accurate in terms of known historical and scientific facts to achieve this.

When science advances at a fast pace, new moral and ethical conundrums often present themselves too late. For example, ethical and social issues surrounding the uses and applications of gene-drive

technologies are struggling to keep pace with the technological possibilities (de Graeff, et al. 2021; Kormos, et al. 2022). Speculative science fiction allows us to ponder possible outcomes of technologies that might be possible in the future (Delgado, et al. 2012; Isa & Hj Safian Shuri 2018). Concerning the Anthropocene and de-extinction (the capacity to bring back recently extinct species) or rewilding (re-introduction of a species to an area), there is the potential to 'change the story' of anthropogenic climate change and species decline. Whether we are considering bringing dinosaurs, the woolly mammoth, or the passenger pigeons back to life, or re-introducing European wild cats to areas they disappeared from over 100 years ago, there is much more to consider than simply the science of 'how'. The 'what if' question becomes imperative. Heise (2016, p. 220) believes 'The Anthropocene' could be understood as speculative fiction, and points to prominent environmentalist writers (namely, Bill McKibben, Naomi Oreskes, and Erik Conway) who 'seek to open readers' eyes to the futures they already inhabit.' Delgado et al. (2012) proposed science fiction could be an important tool to enhance communication between scientists, and the public and has the potential to encourage more inclusive ethical dialogue between various stakeholders. Concerning fragile ecosystems threatened by the predation behaviours of free-roaming cats, a speculative fiction approach might be developed to counter apathy or moral panic and help stakeholders consider possible outcomes of either action or inaction. Opportunities for constructive discourse between conservationists and feline welfare professionals have been identified (Crowley, et al. 2022), and speculative fiction might provide a tool to explore and relate to alternative perspectives. A framework for imagining the perspectives of individual cats may also help guardians decide what is best for their cats and the local environment.

Speculative fiction in education and practice?

Outside of literary works and the entertainment industry, speculative fiction has been deployed in different ways to help humans, learn, think, and address real-world problems. Doyle (2020) examined the value of speculative fiction as a tool to enable young people to critically engage with issues surrounding climate change and described how it can empower individuals to take responsibility for positive change. Drawing upon Donna Haraway's concept of 'response-ability' (Haraway 2016, p. 34), which prescribed the co-creation of meaning, understanding, and caring together, Doyle (2020) described how participatory play and speculative fiction/storytelling, via the 'FutureCoast Youth' workshops, increased confidence and engendered active participation in social change. In Doyle's case study, speculative fiction was used to construct futurist scenarios that, based on what we know, were possible. Essentially, the goal was not to simply teach facts or have students arrive at a consensus opinion, but rather to encourage independent and multidimensional thinking (Doyle 2020). Especially regarding humane education, a speculative fiction approach that asks children to imagine what an other-than-human animal might be thinking or feeling could foster empathy.

A central facet of using speculative fiction in this manner is that it encourages attention to be focused on an individual and what they might be feeling in a given scenario. Gordon Mead's *Zoospeak* poetry collection superimposes a first-person, present-tense narrative to images of zoo animals taken by animal rights activist and photographer, Jo-Anne McArthur (Mead & McArthur 2020). The poems describe the fictitious but possible experiences of the animal in the image and what these individuals might say if they had a human voice. Gordon used repetition to mirror their captivity and the present tense to instil a sense of immediacy (Mead 2021). *Zoospeak* uses the art of poetry as a medium to highlight the role of language in our

encounters with other-than-human animals, the problems with speaking 'for' animals, and issues surrounding the human gaze, and animal agency (Mead 2021; Mead & McArthur 2020). Art has the power to evoke an emotional response, but caution must always be present when 'giving' a human voice to the voiceless. However, I believe fictional voices and narratives can be used as tools to critically think about other-than-humans as individuals. Philosophical ethology recognises the shared animality of all animals, including humans, rendering human subjectivity and human consciousness an expression of the animal condition (Marchesini 2017). Gordon Mead (2021) proffered that poetry may contribute to an understanding of animality, and what it means to be more-than-human, in a way that analytical writing cannot.

> *'I think humans do not necessarily "think" only in words. I believe that visual images, sensations, colours, etc. can arise pre-verbally in the mind and, perhaps, one of the tasks of any writer is to try and 'translate' these into words. One of the differences between say, poetry and analytical philosophy, may well be that poetry is closer to the above sources than any analytical writing. I feel that the writing of poetry is, at least, initially done under the radar of the critical mind'* (Mead 2021, p. 4).

Earlier this year I dabbled in a creative writing exercise that engaged with the concept of my two cats, PeterLe and MaryMae, discussing their research into human behaviour. Published in *The Journal of Imaginary Research*, 'our' abstract (the cats were presented as fictional authors) provided a feline perspective on the cat-human relationship (Hill 2024b). While fanciful, the exercise encouraged me to consider more closely how I interact with my own cats and what they might be thinking or feeling.

Conclusions

In presenting my doctoral research I was faced with the conundrum of how to present the feline perspective, or if I should even try. The question of 'how can' or if anthropologists 'should' speak on behalf of other-than-human animals is something many researchers have grappled with (see Kirksey & Helmreich 2010).

> *'When studying cat subjectivities, I want to be careful about this problem of voice: When trying to get closer to the problem of studying the cat–human relationship from the point of view of the cat, I do not want to say that I can speak for the cat. However, while I acknowledge the differences between humans and other species, the cat included, it would be unfair to the cat and lead to woefully inadequate analysis not to try to understand how a cat experiences the world around her'* (White 2013, p. 96).

Following the same principle as White (2013), I strive to understand how individual cats *might* view the world and what they *might* experience. Speculative fiction holds the potential to challenge anthropocentric thinking by prescribing a practice that entails imagining what other-than-human animals might think, feel, or experience by speculating on the question, 'What would other-than-human animals say?' Just because we cannot fully 'know' does not mean we cannot or should not try. Nor should we dismiss the fanciful as irrelevant.

The reflexive practice I employed while engaging with speculative fiction provided insight into how I engage with and form relationships with cats. In this respect, I recognised the potential of

speculative fiction in educational contexts to foster empathy with other animals, or in practice to challenge assumptions about individual welfare needs. A future goal would be to explore how speculative fiction might be used to encourage people (researchers, practitioners, and cat guardians) to look more closely at cats as individuals.

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Portraits for community cats – the story of a more-than-human relationship

Irina Frasin *

"Animals are answers to questions we don't even know we asked, where they are not embodiments of unanswerable questions, just because they exist, silently, among us."
Therry Caesar

Abstract

In Romania we have a large population of free roaming cats but their presence and life style are mostly ignored. Not as disturbing for the general public as the free ranging dogs, cats are not raising so often the concern for controlling their population. This is giving the opportunity for cat loving people to approach them, learn about and from them and try to make their life easier.

My article/chapter is mainly an autoethnography, based on my experience of living close and taking care of a cat colony since 2015. Maybe the most important lesson learned is that listening to the animals is crucial in understanding and caring for them. Only when we listen, we are considering them as subjects, as partners, as fellow creatures that share our common space. Art played an important part in this realization, helping to seek to deepen my understanding of cats' perspectives. Stray cats are weary and cautious creatures. When I first met them, they didn't know me (or other humans) and wouldn't come close. In the beginning, sketching the cats was a means of getting and staying close to them, in a busy, unthreatening way, a means of habituating them to me in order to better observe them. I love spending time with cats and engage with them as social peers. Thus, in time, they began to be more curious than fearful and now we have a relationship based on trust and respect.

It is such an honor for to be accepted among them. Once you have the love and trust of a cat it is always there; and as all "cat people" know the love of a cat is the most extraordinary gift. Now I continue to take photos and make drawings and paintings of them and these are telling their stories, as individuals with life histories, preferences and adventures. Till now I have not yet put all the photos and sketches together. Some of the cats in the old photos are not part of the colony any more, some have died, some have found better territories. I wish to

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select and exhibit some of these pieces in the hope of raising awareness about these cats and all the other creatures that share our cities. We need to understand that we are not alone and we co-habit these "man-made" spaces with other intelligent and emotional beings that form complex communities and have extraordinary lives that we can all learn from. My hope is that getting to know better the cats of our neighborhoods (and the animals in our proximity in general) and sharing their stories will lead us to building more empathetic relationships with them, in accepting them as co-habitants of our communities. And this may be just the first step in creating multispecies communities.

Keywords
cats, multispecies communities, artistic research methods, cooperation, understanding

Introduction

There is an old and persistent philosophical debate on whether and how creatures without language think. For anyone knowing and sharing their life with a non-human animal or simply reading developmental psychology or cognitive ethology studies it's quite clear that non-linguistic creatures are indeed thinkers. And they sometimes think in ways that surprise and amaze us. I personally believe that life beside cats taught me a lot. Cats are free and unsubmissive creatures, playful and energetic, but they can also be loving and lazy. Living beside them, trying to discover how they think, what they want, and making the effort to understand them changed my perspective on everything. Cats are simply boosting imagination and creative thinking. It is not such a mystery why for the ancient Egyptians, who held them in great esteem, cats were a true symbol of creativity, fertility and rebirth, motherhood, and protection. We still see all this in our cats today. They are fearless protectors of their kittens, they are so fertile that we need to largely spay and neuter them to keep their population in check and they are as creative as miniature artists when it comes to living techniques, finding homes, hiding places, hunting, or entertaining themselves. Living around cats and learning from them is a true privilege for me.

I share my life with two gorgeous and amazing Persians, who are sharing my apartment and are part of my multispecies family, and a varying number of stray cats who choose my garden and my garage as their home, or simply keep visiting me from time to time.

In an attempt to better understand their lives and connect to them, I used all methods available, all knowledge at hand. Early on I started sketching and drawing the cats to be close to them in an unthreatening manner. I quickly understood that an objective documentation process about these cats' lives was neither possible nor preferable. I was getting too involved and I had to accept my bias. Thus, my approach had to deeply and fully consider my engagement in this matter. This paper explores my discovery of artistic methods for better documenting and understanding our fellow creatures. Cats have a silent and almost unnoticeable way of reorganizing your whole existence. There is absolutely no way of being committed to understanding and helping the cats and becoming a kind of "partner" in their community without being responsive and getting entangled in the contexts as they unfold, without getting attached. Both drawing and photography trained me how to look, how to pay attention to detail, how to process that information. I did not use my sketches from the beginning to research the cats but, gradually, I saw that the study I needed to make better drawings helped me better understand them. Cats love predictability and habit, and spending long hours drawing them helped me enter their "private" space. This experience has been transformative both for me and for the relationship I share with them.

Science aims to be objective thus observations and questions are done in a certain manner but taking a break from these rigorous rules and simply allowing yourself to wonder, imagine, have the freedom to explore and stumble upon the unexpected, unexplored,

under-questioned, and underestimated and not be afraid to engage, and even take sides is leading to a different set of observations and questions. And the most astonishing part is that these questions demand new methods to answer them, generally hybrid methods. If we privilege only rationality and intellectual ways of knowing, we miss a lot and we definitely underestimate the other animals as research partners and co-producers of knowledge.

The problem of how cats, and other animals in general, get represented is getting more serious as we wish to do them justice, to consider them as peers and partners. If we are to give them a voice that the human community will take seriously, Donaldson and Kymlicka (2011) suggest it should be made by representatives, people who love and understand animals and can and should talk on their behalf. Nevertheless, I completely agree with Eva Meijer (2019) when she argues that learning about animal languages will help humans better understand and relate to non-humans. I am convinced that we (and by we, I mean each of us) can try “to make visible” and understandable, to “translate” and interpret what animals are telling us. We should make the effort to listen to their yet unheard voices. We should move from "talking for those who do not have a voice" to making efforts to listen and understand their voices, their communication ways, their signs, their rituals, their scents, and other “mute” messages. But we should always be cautious of our interpretations and keep this in mind: they are just our interpretations. I can tell from my experience with cats that animals do want to communicate with us, to let us know what they want and need. We just need to be open for the silent “talk”. This is more visible for domesticated animals because as we domesticated each other we learned to read each other, to understand each other, to express our needs and expectations to and of the other. We co-

shaped each other's evolution and behavior. We should make efforts to learn from our ancestors who were proficient animal communicators. I truly feel the huge responsibility given in becoming an intermediate and interpreter for another species. How I understand and represent reflects my truth, my search, and my understanding; it is just one point of view. In fact, this cannot be stressed enough; this is why sometimes images become more important than words as they "talk" in a silent way like animals do. In an effort to change perspectives and get respect for these marginal animals, the cats, I'm always cautious not to propagate the usual stereotypes about them. For this, re-imagining and re-framing the ways we understand and relate to the cats is essential.

How it all began

"Until you have loved an animal, part of your soul will remain unawaken."

Anatole France

I was never a "cat person". In 2010 I met Bubus, and she became my first cat ever. Bubus is the first person from a different species with whom I coexisted, and this changed my perspective on things and ultimately my life. The experience was profound and transformative. Coming face to face with the otherness of an animal is a humbling experience and this leads to self-reflection. Like most of the cats meeting strangers, in the beginning, she was shy and kept her distance; and I just let her be. She was fascinating to watch from a distance. She's also very beautiful, graceful, and delicate, a true work of art. When she finally let me into her cat world, her trust in me became overwhelming. She opened a search, a dialogue, and led me through "the rabbit hole" – or should I rather say, "the cat hole"?

– to a new reality, to a whole new world, a new perspective. Patience and paying attention are basic rules when it comes to building a relationship with cats. Their language is so subtle that we can hardly perceive it. My interest in ethology, and cat behavior especially, came from her, from trying to understand her. I just needed to know, I needed to understand how cats are in the world and comprehend the world of cats according to cats. But in doing so, this theory can only lead us so far. In fact, my life with this amazing cat has taught me much more, not only about cats, but on life in general. She was my cat-mentor, my cat-teacher, the one who made me want to make a change, she was the one who opened my eyes to a new reality and my life has thus been reconfigured. Like Alice Maddicott, "I became a Cat Woman the moment I was hit with a thud of love that I never realized a creature could produce" (Maddicott 2020, 7). Close relations with animals are transformative: our animal companions are not just pets, but teachers as well[1].

The first cat portrait I ever drew was, of course, that of Bubus. She is still so delicate and shy, but also extremely curious and loving. To truly understand our animal companions, we need to stop our continuous human chatter, our talking, and all the loud noises we make. We also need to take our time. In a world that is becoming increasingly fast, getting out of this flow is a change of pace and consequently a challenge. We need to take our time and listen, watch, feel, smell, and use all our senses. When we love and respect individuals from different species, endowed with thoughts and wishes of their own, as somebody to interact and grow with, we

[1] You can find these ideas and more on this matter in my article *Of Cats and Women: A cultural History of a Relationship* in *Anthrozoology Studies. Animal Life and Human Culture*, editors Irina Frasin, George Bodi, Sonia Bulei, Codrin Dinu Vasiliu, Presa Universitară Clujeană, 2022, http://www.editura.ubbcluj.ro/bd/ebooks/ pdf/3343.pdf

must make the effort to understand. We must make the effort to render what animals want visible to us. We know that we communicate across species borders and we appreciate each other's company. It is a fact that meaningful commitment between humans and animals can exist and the asymmetry in our relations is not destructive, it just requires a balancing act. I have made efforts to be less anthropocentric and more *cattocentric* to understand the worlds and lives of my cats, their *catness*. It is an alien experience and, of course, I fear that I cannot truly get there but the effort of trying opens me to their experiences. Cats experience the world in a different way than humans do, and it can be quite extreme to understand that the world can look, feel, sound, and smell differently. Not asking how other animals see the world starting from our experience, but trying to understand them and ourselves from their perspectives is indeed a game changer. Animals enrich our lives and give us a sense of wonder and mystery (Rollin 2017, 98).

Now I share my life with two Persians whom I love dearly. I take photos of them, draw them, study them all the time, how they move, how they stay still and watch, how they sleep; they are truly fascinating. My love of cats, all cats, regardless of their breed, special breeds, or strays, small or large with special needs or abilities, came from them. These unique individuals have shown me how to see the world from a different perspective, to be more inclusive and less self-centered, human-centered, more open to new, unexpected experiences, and enjoy life in simple ways.

Illustration 1: portrait of Bubus



Building relationships. Cat-sisters and stray kittens

In 2015 I moved with my multispecies family to a new apartment, with a garden. Both my cats are very picky eaters, so I always collect what they don't eat and feed cats on the street, the community cats (plus I am that kind of person who always has a pouch or two of cat food in her bag). In Romania, we have a very large population of free-roaming cats. Most people do not even notice them but they are everywhere. Many times, it's true, it's even hard to make the difference between owned cats that roam everywhere and stray cats. This is mainly because these statuses are interchangeable. Some of the cats fare very well on the streets, some may even enjoy the freedom but, as domesticated animals, they still need human support. They need places to hide from the cold in the freezing winters and fortunately, many of them find

these places in old buildings, garages, basements, etc. Some people even build small homes and feeding stations for them.

I have always (since "Bubus time") fed the cats in the neighborhood where I lived but, since 2015 when I started to have my small garden, I also began to know these cats better. In my old place, there were very many cats fed by many people whom I started to know talking about the cats. The funny part was that we were not feeding only strays, but also cats belonging to neighbors who were roaming free. The dynamic between the cats would have been very interesting to follow, but the space and time were not appropriate, in any case not for me. So, when I had my garden, I decided to know the cats better.

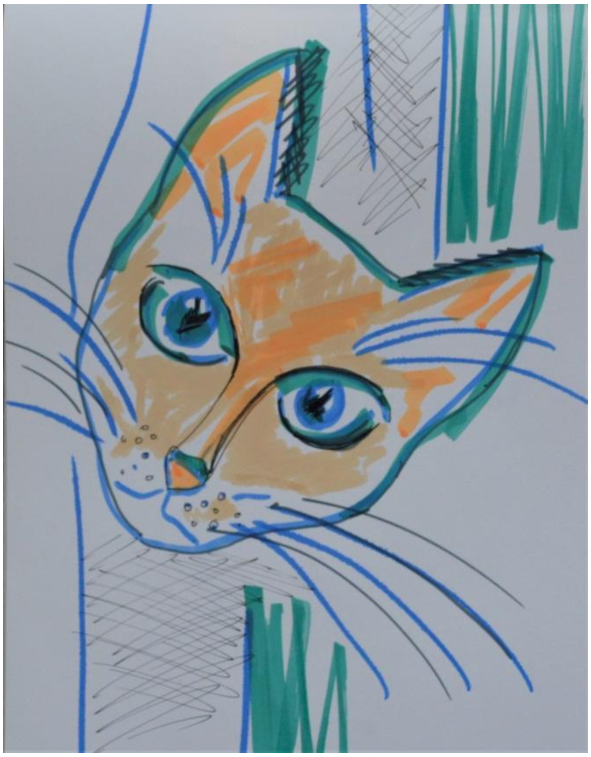
I noticed them, who was coming and when. Unlike the cats I was feeding in my old place, these new cats were very afraid of people and would not even come to eat if I was still there; I had to leave the food and go away. They were rather feral, semi-wild, and extremely cautious of human attention. No human contact before, or possibly bad human encounters could have led to this, no one can tell for sure. They would approach to eat only when I was at a safe distance. This is how the idea to sketch them came to me. I wanted to observe them, but simply being there, and watching them was disturbing. So, involving myself in an activity allowed me to stay, be present in an unthreatening way. The ones coming regularly were two black cats. I imagine they were sisters. The black sisters might have known the hate of people because here superstition is still considering black cats as bearers of bad luck. I was really surprised to find out just how largely this popular belief is spread and how deeply it is rooted still. From medieval times black cats have been associated with the devil and were considered

a bad omen. And apparently, these ideas have not died out completely.

There were other cats too. A large, lazy tomcat, who was far more friendly than the sisters. I really loved this one and called him Obi. He was there only for the first summer and then simply disappeared. I do not know what happened to him, but I do hope he found a better place. This is the case with other cats I know. Many soft-tempered cats find their homes, with loving people. We know that cats choose their people and their homes if they are free to do so. Other cats from this big cat family did this and they still come to visit me from time to time; some of them for several times a year, or very rarely anyway. However, I have never seen Obi again since he left.

I loved to drink my coffee in the morning on the terrace and observe the cats in the garden. They always come in the morning for the food; they quickly learned the schedule. They eat and they clean themselves and then lie in the sun. They are the perfect image of relaxation and satisfaction with life. Drawing them was not an easy task. First, I tried from a distance but then I moved closer and closer. Using baby steps it was possible. As time passed, they started to get used to me. To this day, I am ambivalent about what I did. I had the best of intentions but, I am afraid that habituating the cats to me, making them feel at ease around humans may have exposed them to danger. I simply cannot wonder whether this was not the case of Obi's disappearance.

Illustration 2: Obi entering through the fence.



The two sisters settled better in my garden and I only then noticed that they were both expecting kittens. Maybe they were the ones driving Obi away to make their territory safe for the little ones. I will never know. In this place, cats were far wearier of people because neighbors were not so cat-loving as in the old place. Most of them preferred not to see cats in their gardens. So, the sisters decided my garden was safe enough and it had many hiding places (as I was just working to arrange it, a lot of new things were being brought and not put in place just yet) where to have their kittens. Of course, after the kittens were born my work had to slow down. They were moving the kittens everywhere and I was simply cautious not to disturb them. I made big efforts to draw and take photos of the kittens, but I was simply not good enough for this job.

One of the sisters had three kittens and the other four. The mother of the three was agitated and a little crazy. But not for long; this mother left her kittens when they were quite young. She just left a few blocks down the road. It looked like motherhood was too much to handle for her. The abandoned kittens got lucky as the other sister adopted them and took excellent care of all seven kittens. This cat, whom I called Big Mama, is the very model of a mother cat to me. She took wonderful care of her kittens, the ones of her sister and the ones of her daughters after that, her grand-kittens. Of all the cats in the colony, she was the best mother, the most caring, the most affectionate, the most loving. When I started the Trap-Neuter-Return program for the colony, she was the only cat about whom I thought that she might miss motherhood.

The intruder

Feral and stray cat colonies, in general, look egalitarian. But there are very strong bonds forming between different members (sometimes surprising, unexpected bonds). Most importantly, cats do not have alpha specimens or leaders. Cat societies are matriarchal and female cats in the colony may never leave it all their life. Young males are migrating out of their maternal families in search of making their own. So, obviously, I had migrating male cats visiting my garden colony.

I called the biggest tomcat that dominated over the cat family in my garden Pasha. He is large, very self-confident, and has a huge territory (I have seen him streets away, many times). One summer, I saw a new cat that had made a home somewhere between gardens, mine and the next neighbor's. I started to pay attention and discovered that it was not just one adult cat but also her kittens. They did not dare to venture into my garden because it was the territory of the other cat family. But the kittens sometimes crossed the fence and played with the other kittens in the garden. It was a delight to watch. But then, it

was not only me enjoying watching the kittens play. Pasha, up on the garage, was carefully watching over them. We know that cat fathers have nothing to do with raising the young, they are not involved. But in this particular case, not only did he look after the kittens but he also brought them and their mother closer to where the food source was. Of course, I fed them too, but in their place, at the fringes of the other cats' territory.

This was kind of the last generation of kittens because after this the TNR program that I kept working on for about two years started to show the results and no more kittens were born. Everybody who has ever been involved with community cats I think will agree with me: although kittens are great, many of them suffer and die because of overpopulation. Thus, the number one concern is how to reduce their numbers. TNR programs may be very stressful and disturbing for the cats, but till now, they are the only humane way to avoid great suffering.

But even after all the cats were neutered, the big tomcat kept the connections with the family, so I still see him from time to time in the garden. Also, Big Mama found a better home some blocks away and she rarely comes to her former territory. Now, the "base camp" is formed by her two daughters from the first year, namely Tee One and Tee Two – Tee One is more assertive and Tee Two is gentler and loving.

I'm not a painter so my drawings are a bit clumsy, but they worked to get me close to the cats. They got used to my presence and accepted me. I also needed time to adjust, to look, to learn, to feel at ease with the task, relax and listen, watch, register, to get to know them better.

Illustration 3: cat family portrait – Tee Two, Rosie and Pisi (her daughters from different litters), and Puiu (son of Tee One); these four are almost always together.



Adventures and adversities. Our story

The story of our relationship, our multispecies community is somehow reflected in my drawings and photos. Looking back now I see our history together; true, not as a continuum but as impactful moments and faces of individual cats who impressed me and taught me important lessons. Building our relationship together, being

attentive and conscious of the others' needs and desires gives me hope for the future. We, humans, are not alone in the world and this is or should be seen as a privilege. To be able to feel and possibly understand the extreme richness of our world by treasuring the richness of our own communities, by seeing the connections between us, and by exploring the world with newly opened eyes are transformative experiences.

Sharing life with cats has been my utmost privilege. I owe this experience first and foremost to Bubus and then to all the wonderful cats that share/ shared my life. They have come into my life and they are all my friends and family; some very close friends, others distant acquaintances. But we all walk with care beside each other, respect the distance between us, and most importantly try not to disturb.

Cats are highly social animals (even if it took us a long time to acknowledge this). This is what makes the observation of stray and feral cats so precious, interesting, and important. In their natural environment, in their normal families, the interactions between cats are sometimes unexpected, but most of the time extremely affectionate towards family members. If go further than observing the companion cats brought into our families and trained to make them live by our rules, observing free-living cats enriches our knowledge. It can also prove quite helpful in better understanding our cats at home.

Life in the cat colony is not always easy. Especially before the TNR program I was heartbroken at the kittens' infectious diseases, vets' visits, and ineffective treatments. Nature is cruel in maintaining an optimal balance in population numbers. This is why I find our role important. There were, of course, other dreadful stories of some neighbors, hateful of cats, who poisoned, trapped, and wounded them. I have my sad cat stories, but unfortunately, they are so similar to other stories told by other people caring for strays. These are trying times

when I get less hopeful for the future and the possibility of truly living in multispecies communities.

The first time I realized that the photos were starting to tell their stories was after an accident. Tee Two was trapped in one of those horrible devices people still use to rid their gardens of unwanted visitors. Getting the cat to the doctor was a great challenge as I had to track her to her hiding place and find a way to get her in the carrier. I was so emotional, so upset, so outraged that these devices were still in use that I felt I had to document what happened so that all the neighborhood should be warned. So, I took photos of the poor wounded cat. I did not think of privacy, of keeping the usual respectful distance and all the rest. I was just consumed with the idea of preventing this from happening again. This was the time when I realized that if I wanted the photos to tell their story rather than just highlight what I consider important and worthy of recording I should not be guided by what I perceive as important events. I should just keep working, drawing, sketching, and taking photos. Only by putting these pieces together later, I can recover their stories, their scars, their good and bad times, not only what I imagine but what these images, taken regularly but not marking anything I find special (no special time, no special events, no special weather), tell me and us. Art products carry some knowledge that we cannot express in words. My idea is that the same drawings or photos seen at different times may bring different information; this is why I see they are telling their stories, and they are there for us to discover at a second, third, or more glance. Maybe these sketches and photos will help those watching change their perspective, try to see through the cat's eyes, try to get in predators' paws, and thus better understand them.

Illustration 4: photo of Tee One in the garden



Death and dying

In the world of free-living cats, death is always "just around the corner". Statistically, only 4% of the kittens born in community cats' colonies make it to adulthood. Life is hard and full of danger and, by far, the greatest risk for them is us. Learning to make it by yourself in a human-dominated world, as a free-living cat, takes knowledge and skill; this is why kittens are victims of all kinds of accidents because they are not ready yet with full knowledge and experience. Plus, we all know cats are also very curious and this is getting them in a lot of trouble. Add to this the raging viral infections that are decimating the cat communities and you get the picture of the hard life these tough little beings must face.

Taking care of stray cats is never easy and many times we have to say "good-bye". Cats always hide when they feel they are dying. This is what their instinct is telling them. When you are sick or injured, when you don't feel good you are vulnerable, and we must always

keep in mind that these fierce predators are also prey to larger creatures. So, no cat wants to let the others know about her vulnerabilities. When they are hurt, they hide. On different occasions, I found dead cats hiding in my garage. I don't even know how or why they died. I simply found them sleeping forever in their boxes.

In the world of community cats, death is just part of living. Also, it's important and inevitable to notice that these cats are exquisite predators and magnificent killing machines. And no matter how well-fed they may be, they still keep this instinct. It is not something that can be breaded out of the cats. This is who they are, and this is their place and role in life, they are predators, obligate carnivores. Many debates on how feral cats are damaging the wildlife, driving birds to extinction, and putting these small but fierce predators in a bad light. Actually, we should learn to adjust our perspective to fit it better with the order of things in the natural world. Death is just part of life and with no death, there will be no life, all is transformation.

The most impressive and saddest story is that of Prăpăditu' the gentlest and most loving of all colony cats. He was an orange beautiful boy, one of the largest of his litter. He was also the friendliest of all cats I know. He simply loved and trusted people and this was his condemnation. He was wounded by a trap, or by a person, the vet could not tell me for sure. He went missing for about a week and when I saw him again all his face was crushed and full of blood. I rushed to the vet, who referred me to the best vet surgeon in the city. But he never recovered. All our efforts were in vain. To this day, I keep questioning all my decisions. I keep thinking of him and what I could have done differently. I drew his portrait several times as a way to cope with the grief. If death is something I can accept as inevitable, with suffering I'm still struggling; suffering still seems avoidable and unnecessary.

Illustration 5: Portrait of Prăpăditu'



Listening to the cats. Seeing the cats

"An animal exists not only to be spoken about but actually himself to speak"

Terry Caesar

How we live together, human and non-human, and learn from each other shapes us into who we are and who we are becoming. Animals have a claim on us. Even if, looking at them closely we may understand they inhabit a different and maybe alien realm, they still oblige us to see them, question their existence, and respond to their needs (whenever and however possible).

I sometimes wonder how a proper dialogue is possible between us and our companion animals. Most of the time, it seems to me, they understand us much better than we do them. We communicate, and this is clear. But what are truly the limits of our understanding? Our body language, posture, smell, tone of voice, and small signals all send

messages to our non-human companions. And they read them so well, better than we can do it ourselves regarding other fellow humans. And they also send signals to us, they communicate, they send messages. And if these messages are not clear for us is only due to our human limitations. When exploring and making the effort to understand animals from different species and make sense of our interactions and relations it is of paramount importance to remember that most of our communication is non-verbal. This is why it is so important to make use of new research methods, new ways to study others, methods that do not rely on or re-enact "the old power games and discourses by silencing animals" (Hamilton and Taylor 2012, 49).

Living with cats and loving them I became aware of a consciousness that exists beyond our own. I have a strong conviction that we can truly understand the communication of other species if we make constant efforts, but for this we should always keep our minds and hearts open for unexpected experiences. Art has a special place in helping us do just that. It is an alternative to the traditional methods of gathering data and making observations. "Art serves as a companion for troubling nature-culture dichotomies because it does not dismiss the symbolic and physical significance of animals in the way that traditional methods have done" (Hamilton and Taylor 2012, 49).

All our efforts to get close to, and understand animals begin with communication. Living close to animals really helps understanding, helps build bridges. Living among cats and establishing close relations to them helps me see them as persons, know them as individuals. This is the reason my text has this personal positioning. The fact that I write as the companion of two cats (whom I hold as a family) and an acquaintance of community cats, that choose to share my human space is important. This is my perspective. I am making the effort to offer the cats a central part in our interactions and reflect upon this.

Speaking about, for, to, or of animals is hard, it is provocative. To understand the complete, absolute, total Otherness of the animal is both a challenge and an opportunity. It is possible to meet the *Absolute Other*, to know him/her, acknowledge his/her individual presence, to make an effort to understand him/her. But more than knowing, it is possible to love them, to build bridges, and finally discover we are not so far apart. The fact that we sometimes fail to understand animal communication, the fact that animal languages are still opaque to us, and that when animals speak to us we dimly understand them or fail to understand them completely means that it is up to us to speak about them (to our fellow humans). Or, ideally, we should allow them to speak through us when our understanding (by love, affection, empathy) of them allows it. Their representation is a huge responsibility. I feel that with every stroke of my brush and every letter I type.

I do not presume to understand them, but I know that my limited human capacity of knowledge is growing in this effort. I always respect the distance between us, and their otherness, their separateness and opacity. Stray and feral cats have their ingenious ways of letting you know the limits of getting too close. Knowing our boundaries is growing our trust.

A few closing lines

What follows from our coexistence with animals is that considering the admiration for the otherness of the animal can form the basis of a real friendship. Further, the differences between humans and non-human sentient beings can lead us to form a new perspective on ourselves. There is still the risk that our communication can get anthropomorphized. Being conscious of it should keep us attentive. Our community animals, the ones that always coexist in our proximity,

can help us reconfigure how we pay attention, how we listen, and how we are open to dialogue.

Communication with cats is not vocal, or rarely vocal, it is almost always tactile and visual. What cannot be put into words can be put into touch. Thus, art can be extremely helpful in sharing information, feelings, attitudes that would otherwise remain hidden. We know that we still cannot have any direct access to the private worlds and lives of other animals (or even other people) but by making the effort to offer them the central stage we can hope to understand how we and our relationships affect and change each other. We can hope to become co-creators of a shared multi-species reality.

The visual image of an animal works to bring forward, into the open, into the light the animal's story, with all its disruptive potential. To tell stories about their Otherness, their lives, their autonomy, their hardships, and their choices is very important. Animals are the only non-humans who answer us (even if we cannot always get their answers). It would be very important if our own images and speaking of animals could include their perspectives. However, we should always remain careful when talking about this or claiming this to avoid anthropocentrism and anthropomorphism. We should always acknowledge our positionality.

Cats are good to think about and to think with. Cat images work like reflecting mirrors for me. We may see in them what us, ourselves put in there. How can we truly reflect their stories is an ongoing and maybe perpetual question. But the effort done in this direction is building knowledge, empathy, connectedness. Thus, showing my images of cats, photos, drawings, paintings bring the possibility of sharing experiences and opening a dialogue on building up a society, community, and culture more receptive, more empathetic, and more multispecies.

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The Imagery of the Stag – A Comparative View

Gabriel Șerban*

Abstract

Animals have not only accompanied us throughout our natural history but also throughout our cultural history. Ever since our first encounters in the wild, to the present day, the sight of a creature of the size and posture of a stag, has never left us indifferent, no matter how anchored we might be in the magical thinking of our ancestors, or the scientific thinking of the present. We're therefore not surprised by its rich imagery, wherever we have lived together, from the Middle East, Southeast Asia, Europe, to North America. As expected, such an imposing animal will exceed its biological limits in myth and take on fantastic dimensions. It is certainly the case of the species under discussion, which occupies a special place in the mythology of the Romanians and, as we will see, of the neighbouring peoples. Archaeological findings indicate we also had traces of a symbolic thought towards the deer dating back to prehistory here. The present article proposes a brief review of the stag-related myths, without being exhaustive, starting with the representations of the peoples of the steppes, up to Western mediaeval bestiaries and encyclopaedias. In our country, the Physiologous brings Christian symbolism and overimposes it over an already rich mythos related to cervids. By that time, there were circulating too, a series of animal legends, tales, together with the solstice carols of clearly pre-Christian origin, that seem to preserve a form of ritual report towards this animal, possibly from an ancient background of a shamanic or maybe even totemic nature. After Christianization, we were far enough from both Rome and Constantinople that these old rites survived hundreds of years after their slow decline in the West, right into modern times. We have recovered marginalia illustrating men dressed as stags and witness accounts from early Church members commenting on cervulum facere, a fertility-related solstitial dance popular in Medieval Western Europe, very similar to what we still have today. From this point of view, the Carpathian area proved particularly conservative as an ethnological reservoir. The secular carols along with the New Year processions (Colinda Cerbului) seem to indicate an extinct cult of a stag-shaped entity, which later turned into a masquerade, into a dance, and whose vague memory remained throughout folk tradition in Romania. We detect two different and parallel mythological

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traditions that rarely borrow one from the other even though they stem from the same animal – the old folk sources with roots in pre-Christian belief (like solstitial songs, fairy tales, and various superstitions) – and another one in high culture (that is, heraldry, religious painting, didactic literature, and courtly culture in general) which is of later, Mediaeval origin.

Keywords
stag; Romanian mythology; ethnology; ritual; legend; symbol; animal

Introduction to the stag's imagery

Red deer herds at the break of autumn days, with the males roaring loud like bears, exhaling steam, and confronting each other during the rutting season, are among the great natural spectacles that remain forever etched in the memory of any observer, whoever they may be. From the earliest encounters of the archaic man in the wild to the present day, the sight of such a creature as a stag has never left us indifferent, no matter how rooted we may be in the magical thinking of our ancestors or the logic of the present.

It is no wonder, therefore, that its rich imagery accompanies us wherever we have coexisted throughout time, from the Middle East, Southeast Asia, Europe, to North America. As expected, such an already imposing animal will surpass its biological limits in myth and acquire fantastic dimensions, often imbued with significance, distinct from other members of the species: the golden hind, a stag with golden antlers, one with eight legs, sometimes having bronze hooves, the white stag, the stag with a cross on its forehead, and so on. It will thus become a totem, an omen, a founder of tribes, a messenger of the gods, indeed an epiphany. Evidence of this long-lasting symbolic tradition is its constant presence in the cave art of our continent. Since the earliest known artistic manifestations, humans have chosen to depict deer. Their horned figures with intricate antlers adorn entire cave ceilings in Lascaux (Fig.1) and in the Trois-Frères cave. Also in present-day France, an anthropomorphic hybrid of a stag, nicknamed *The Sorcerer*,

seems to fixate on us, etched by an unknown creator about fifteen thousand years ago. If this is a shaman, it is certainly not the last time that such a practitioner of the sacred will be wearing the skin of the deer or the stag's antlers in our story. From the Italian Palaeolithic, another clue comes to us regarding the symbolic importance of the discussed species: a small stone on which we find the etched figure of a therianthrope with a woman's body and a hind'[1]s head, named *Ciottolo di Tolentino*, Italian for "Pebble of Tolentino" (Massi et al. 1997). The silhouette is depicted with crossed hands, visible breasts, and a pubis clearly marked by an equilateral triangle, her head looking over her left shoulder. Are we dealing with a real human-animal hybrid in the creator's vivid vision, a purely imaginary mythological being lost in time, or a real person simply wearing a deer mask? Or perhaps we should question whether archaic thinking perceives such a distinction as we do nowadays. It is undoubtedly impossible to reconstruct its meaning with certainty today, but one thing is for sure: the deer has been populating our dreams for a very long time indeed. From the shores of Flixton Lake in present-day England, at Star Carr, a series[2] of Mesolithic mask-like objects made from deer skulls with short-cut antlers and holes in the skull for eyes have been recovered.

Naturally, the Romanian space is no exception. In the Climente II, Gura-Cheii caves in Râșnov, Poiana Cireșului in Piatra Neamț, or at Cuina Turcului, vestigial stag canines with perforations have been found, most likely worn as pendants (Cârciumaru 2018, 157), emphasising the importance of the animal in primitive symbolism. The

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[1] Although there have been several speculations regarding the identity of the depicted species, some considering it to be a horse, we believe that most likely we are dealing with a hind. Not only the triangular shape with a pointed snout and large ears leans the balance in favour of this interpretation, but also the presence on the reverse side of a stag.

[2] So far, some 33 such objects have been recovered from Star Carr and a few more from Germany.

stag remains well-represented from very distant times in decorative motifs, rituals, carols, legends, and writings. For example, we find stags in Neolithic cult ceramics from the Criș-Starcevo and Boian-Gumelnița cultures and later in Dacian art (Coman 1986, p. 160). Antlers can be found in some graves dug out from Lepenski Vir, on the Serbian side of the Danube at Porțile de Fier Gorge (Russel 2012, 67), and in the Neolithic complex of Parța (Timiș County), where although the image of the bull/aurochs is dominant, we also find the terracotta head of a stag in an enclosure that archaeologists later named the *Stag's Chamber* (Lazarovici et al. 2005). Two of the silver cups from the Agighiol treasure (Tulcea County) are adorned with stag figures - one with a normal animal, the other with a fantastic eight-legged[3] specimen. We also find them later, on ceramic tiles, carved along with religious motifs, or depicted in church murals as we will later see in this study.

Terminology - deer, roe deer, reindeer

We must clarify the generic term "stag" right from the start. In a broad sense, it refers to any of the male individuals of large deer species. In a strict sense, it specifically denotes the male of the European red deer, also known as the Carpathian deer (*Cervus elaphus*). Most of the *Cervidae* family members exhibit clear sexual dimorphism, and here, the females without antlers (referred to as hinds) are easily distinguishable from the males. They sometimes appear as "she-stags" in folk tales and even borrow the characteristics of their mates, the antlers, although this doesn't happen in reality.

[3] Supernatural stags (as well as other hybrid animals) with eight legs often appear in oriental writings under the name *sharabha*. Polymelia is a rare malformation that results in a higher number of limbs than normal in animals. Most of the time, such eight-legged specimens die at birth, but this doesn't rule out the possibility that they were interpreted as miraculous in ancient times when they were discovered.

On the other hand, when we refer to stags depicted in prehistoric art, they could be the larger relatives of our present animals, called Irish elk (*Megaloceros giganteus)*. They were giant cousins (reaching 2 metres in height at the shoulder and over 3 metres in antler span) and were part of the megafauna during the Ice Age, spreading throughout Eurasia from the early Pleistocene to the beginning of the Holocene. Fossil deposits in Romania show that such extraordinary creatures were a common presence until approximately eleven thousand years ago (Codrea and Solomon 2011, 104-107). They represent some of the most elegant and impressive silhouettes in Western rock art. Surely, they must have left traces in the unwritten culture of local populations on our territory, and if these traces had any real continuity until later times, it is not difficult to imagine how the portrayal of the modern deer might have overlapped with that of its giant ancestor at some point. Therefore, in Romania, we will talk about the fallow deer, the red deer, and rarely about the moose (*A. alces*). Similarly, the reindeer (*Ran gifer tarandus*) in Arctic regions are also part of the deer family, and in mythical contaminations, they were most likely equated with the European stag, which is much more common. Although now restricted to cold regions, their Pleistocene forms populated Central Europe.

Lastly, when referring to stags in mediaeval bestiaries, it is not clear whether the author is referring to the common red deer male or the fallow deer male (*D. dama*), as both species were present where these early animal texts circulated. There are also confusions between hinds and does, along with their counterpart, the roebuck (*C. capreolus*). Despite being distinct species, the oral tradition sometimes leaves room for interpretation, and the two intertwine. Therefore, in our study, we discuss about the archetype of the stag, a general template recognizable both across time and wide space, an image that is familiar to Celts, Thracians, Scythians, the later Romanian peasant, the shaman

from the Caucasus, or the courtiers of mediaeval Europe. The Asian species that arrived from the East will also be assimilated into such a generic portrayal.

Deer mythologies

Stag-related myths are well known back from classical antiquity. Symbols of Diana/Artemis, they are creatures always closely connected to the forest and hunting. The young Actaeon is cursed and transformed into one, then hunted by his own hunting dogs because he saw the goddess while bathing (Clébert 1995, 68). The Romanian fairy tales *Ită Jurubiță* and *Frumoasa Frumoaselor* retain the memory of this Greek myth transmitted and then adapted to the local mythos. It is not Actaeon this time, but a boy that surprises the fairies while they're bathing. He is thus cursed to turn into a stag and will, just like his ancient counterpart, be pursued by his hounds. The difference is that in the Romanian fairy tale the young man is no longer trapped and torn apart, but manages to escape, turning back into human form through a magical trick (Cioancă 2018, pp. 459,460.). One of Hercules' twelve labours is to capture the hind of Ceryneia (*κερυνῖτις ἔλαφος*), a sacred hind (actually, more accurately interpreted as a doe) of Artemis (Fig. 2). Interestingly, this female has golden antlers (like a male should), which reminds us of the atypical female reindeer, also bearing antlers. Hercules pursues her far into the northern lands of the Hyperboreans, where the sun never sets, a suitable home for these arctic ruminants. It won't be the first time a hind becomes a stag, an androgynous mythic figure with antlers, as we will see with other stories, like the Altaic ones.

In his *Natural History*, Pliny the Elder narrates, among many zoological details (some closer to reality, others more fantastical), the relationship between stags and snakes, an image that will persist until late in the European Middle Ages through bestiaries, interpreted from

a Christian perspective. It is said that the stag is a great enemy of all snakes, seeking them out in their underground burrows. It drives them out by blowing strongly into their tunnels and then devours them (Pliny, VIII: 115). Also, in Pliny's accounts, fumigations with ground antlers not only drive away snakes, but are believed to cure epilepsy too. This information is still perpetuated in the 13th century by the encyclopaedist Thomas de Cantimpré, who tells about a special remedy for driving away snakes using the smell of burned antlers)

Similarly, we find the information widely circulated in medical writings, like in Hildegard von Bingen’s *Physica* (1998, 213), where it is also recommended to burn the horn against evil spirits. The scholar nun also reuses the story of the deer's confrontation with the snake/basilisk which will become the norm throughout mediaeval literature. It's difficult to find in nature a clue to the origin of this strange legend. In fact, it is possible that it lies more in grammar than in the real world, as Tudor Dinu noted in his comments on Pliny's Natural History (2001, 250). Elephants were known to drive out snakes from their holes with their breath back in Antiquity, an equally unreal but at least visually more plausible image, because they have a trunk. Through the proximity of their Greek names, the two creatures, the elephant (Gr. *ἐλέφᾱς*) and the stag (Gr. *ἔλαφος*), become contaminated and share some of their imagined behaviour. Lastly, due to their keen sense of hearing, stags come near any shepherd that would sing beautifully. Because of this, in mediaeval allegories of the senses, the stag will represent hearing.

Getting back to the peculiar belief about its curative properties, in Romanian folk medicine, epilepsy was treated with a powder made from vinegar and stag hoof (Leon 1903, 255). Its profound apotropaic role doesn't escape the Jewish tradition either: it is said that while Moses was traversing the desert, sprinkled deer horn powder to ward off evil spirits (Belova 2001, 106). Several Greek authors, including

Pisander and Pindar, record a legend, probably of Geto-Scythian origin, according to which a "she-stag"(Rom. *cerboaică*) with golden antlers guards the mouths of the Danube, given by the nymph Taigete to the goddess Ortoisa, in the city of Histria (Vulcănescu 1985, 93). If we turn to Western Europe, the Irish and Scottish call deer the *fairy cattle*, once again highlighting their magical nature. Saint Patrick metamorphoses into a deer (not unlike the Celtic shaman we must say) along with his disciples to escape the persecutions of the pagan king Lóegaire. Perhaps the newest addition to European cervid mythology is Santa Claus with his sleigh pulled by reindeer. Perhaps he is indeed the newest in a series of supernatural beings found in Greek, Celtic, and Slavic lore among others, that have harnessed this kind of animal. In our own Romanian tradition, the old hag in the forest (Rom. *Muma-Pădurii*) drives a wagon pulled by stags, and the wagon itself is adorned with a deer hide (Bîrlea 1976, 99).

For Polar Circle tribes like the Sami, reindeer are not just a means of subsistence but also an animal with strong symbolic significance. The stag (here a reindeer) steals the sun and fairs it in its antlers far away in another realm. The pursuit and hunting of the deer represent the return of the sun in the sky. Additionally, the shaman rides it to reach other realms (Fig. 3), and the chaotic jumps of the reindeer under the influence of toxic mushrooms like the fly agaric (*Amanita muscaria*) might have inspired the idea of flying itself. Even more so, a way to benefit from the hallucinogenic properties of the mushroom without exposing oneself to the risks of fatal poisoning is to feed it to the reindeer and drink their urine—a product already diluted and less dangerous but still retaining its psychoactive properties. In truth we don't know why reindeer themselves consume these fungi, but it is certain that they actively seek them out and graze on them despite their toxic effects. They may ultimately be a valuable source of energy in the food-poor tundra, even if they incapacitate the animal for a few hours,

making it wildly uncontrollable. The projection of the reindeer into the sky is widespread among the inhabitants of the tundra, and the Tungus people believe that the stars are holes in a giant reindeer hide that forms the firmament. For these people, the reindeer is among the most important auxiliary spirits, sometimes being an *onindar*[4], that is, a "mother-animal", an animal double of sorts, a creature that the shaman can use to travel to the underworld[5], the realm of the dead (Delaby 2002, 35). Proof of its importance is the shamanic staff ending in a hoof shaped bulb and the iron antlers adorning the shaman's hat, both obtained through great effort, sometimes only after six, nine, or twelve years of consecration. This metal crown is the latest addition to the reindeer costume, an amazingly spectacular and complex one, which can weigh up to 40 Kg. (Delaby 2002, 81). One of the turning points of Eurasian civilization was the taming of the reindeer. Although we had hunted them long before domesticating them, now the life of the community got permanently linked to the migration of these herds towards new territories. We cannot exclude that a vague and unclear memory of those distant times remains in the foundation myths involving cervids, when a few people, hunting the stag, discover new lands and claim them as theirs.

Undoubtedly, the ancestor of all western bestiaries, the *Physiologus*, written by an anonymous Alexandrian in the 2nd or 3rd century, has a significant contribution to the continuity of the image of our animal after the decline of the great polytheistic religions. The old dispute between stags and serpents is now reinterpreted in a Christian sense, and the opposition becomes evident – while the mammal symbolises Christ himself, the vanquished reptile becomes the devil.

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[4] From the Tungus *onii* = mother.

[5] The underworld should not be interpreted negatively, like an underground hell. The Tungus cosmos is divided into three distinct worlds: the lower, middle, and upper worlds, like three superimposed disks.

The proximity in Latin between *cervus* and *servus* is emphasised, serving as an epithet for the Saviour, as in the Middle Ages false etymologies were quite popular, a mark of the profoundly symbolical thinking of that time. Former defects become qualities, and the animal's supposed cowardice suddenly turns into the prudence to which all Christians are encouraged. The vigilance of the beast seems to have been understood as cowardice back in ancient times, even among the Greeks, where having a stag's heart (*κραδίην δ' ελάφοιο*) means being cowardly as well. In the Iliad, Achilles tells Agamemnon, *You drunkard with the eyes of a dog and the heart of a stag* (*Οινοβαρές, κυνός όμματ' έχων, κραδίην δ' ελάφοιο*) (Homer A: 225).

The same attitude towards the fearful stag can be found in a Carthaginian metaphor, where, according to a mention from Mauricius's *Strategikon*, Hannibal himself said that he would rather fight against an army of lions led by a stag, than against an army of stags led by a lion (Szekely 2012, 71). Certainly, here things must be interpreted in the context that the ancients have accustomed us, and Hannibal fears a courageous general more than an army of brave soldiers led by a coward. This position towards the proud but fearful stag is also found in a Romanian etiological legend from Muntenia region, where the animal wishes to become the king of all beasts. God had asked it if he wanted red fur, if he wanted a spotted body to set it apart, but the stag cannot be satisfied with anything less than a crown (Brill 2006, 95). Despite such adornment, it can't dominate the other creatures and runs straight back to God as soon as the wolf shows its fangs to it. And as it had requested an oak crown as a symbol, it is next cursed by the Creator to wear it forever, but dry and leafless, in the form of antlers (Brill 2006, 270). Thus, we observe once again the connection between the plant and animal kingdoms, as well as a dethronement of the deer entity over time, from a totem and fertility symbol revered in archaic societies, to a symbol of fear and unfounded

pride in classical Antiquity as well as in our own Romanian zoological legends.

Imaginary ethology participates in perpetuating magical practices using antlers or other parts of our animal. Fumigations with stag horn continue to keep snakes at a distance as we've already seen, its teeth become amulets against these reptiles, stag fat smeared on the body makes us invulnerable to venom, and its skin is preferred to cover the Bible. Pastoureau reiterates a history from Jacques Berlioz, who, in turn, tells an anecdote precisely in this sense. The biographer of Saint Columba, Jonas of Bobbio, writes how, one day, the monk finds a dead deer in the wild, killed by wolves, and a giant bear feasting on it. The Saint asks the bear not to eat it all, but to leave him the skin for sacred books and shoes. The bear obeys, of course, and Columba's monks come to retrieve the skin after the animal is done eating (Berlioz 1999, 51). Moreover, in the same note of repelling all evil, the totem erupts within the Church itself, and Pope Clement VI is literally fascinated by the imagery of the deer. In the Papal Palace of Avignon, his studio is named *La chambre du cerf* (the stag's room), and the pontiff orders to be buried (in 1352) in a grave adorned with roses and crosses, and that his body inside to be sewn in stag's skin. This is a rather peculiar last gesture coming from a pope since, from ancient times, among the non-Christian Germans, the dead were wrapped in stag skins, an important psychopomp animal for them (Eliade 1995, p. 157).

Certainly, these associations are adopted in Christianity from an older background, where the animal plays the role of an *anima loci*, a forest spirit, almost blending with it. For example, in French, the blending of the beast with its environment goes as far as the lexical level, and the word *bois* not only means *wood* and *forest*, but also *antlers*. Furthermore, the Dominican scholar Thomas de Cantimpré assures us in his work *De natura rerum*, written between 1224 and 1225, that such adornments discarded by the animal each year will bloom and leaf out

if planted in the ground, just like a sapling (Pastoureau 2011, 78). In Romanian, we retain the same word similarity and call the branches (Rom. *ramuri)*, derived from the Latin *ramus)*. Depending on their shape and location, they are given rather poetic names, such as the "ice branch", "the wolf's branch", "the wind's branch" (Negruțu 1983, p. 64).

In local beliefs, it was said that during winter, the trees bend their branches specifically to be reached by the deer, as they are the purest among animals. Some of the Romanian versions of the aforementioned *Physiologus* also speak about the stag, such as the one copied by Seraphim of Bistrița titled *Word of humble wisdom* (Rom. *Cuvânt de smerită înțelepciune*) from the 17th century, the manuscript of Andronachi Berhecianul from the 18th century, and that of John of Damascus translated in Romanian in the 17th century. The first two versions repeat the same information almost identically. Seraphim writes as follows:

> *The stag serves as an example. It lives for fifty years, and when it realises its old age, it wanders through the mountains, smelling and searching for snakes in their holes. And if it finds a snake, it swallows it whole and runs very fast and immerses itself entirely in water; it drinks a lot of water because if it drinks, it does not die but lives for another fifty years. But if it does not drink soon, it dies immediately. For this reason, the prophet says: As the deer yearns for streams of water, so my soul yearns for you, my God*. (Anonymous 2001, 38).

The image of the snake swallowing stag (Fig. 10) is found not only in manuscripts, but also in iconography. In the Moldavia region, for example, on the northern wall of the Sucevița Monastery, we can see a painting of such a stag searching for the reptile. This is not a singular appearance, as we can find stags depicted on the facades of the tower of the church Râu de Mori, either alone or accompanied by crosses,

which, in turn, are like the drawings on the tower in Gârciu. They also reappear in the sanctuary of the Sângeorgiu Church, alongside horse silhouettes (Szekely 2012, p. 303).

Returning to Damaschin Studitul's text, he completes the portrait of the stag with a few elements. One of them is that stags without antlers are harder to spot since they would be ashamed of lacking them and would hide from people until they replace them. This detail is taken from Pliny, who anthropomorphizes them less, and fear rather than shame makes them shyer, as they would be defenceless. Then, we are told about a certain spider called *anafedar*, whose bite is deadly to humans. However, *if a deer is bitten by this spider, it hurries to find ivy and other herbs. And by eating just a little bit of it, it is healed*. Nor is the medical knowledge of our animal a novelty. Pliny's *Naturalis Historia* also tells us that deer use certain herbs with healing properties for themselves and their offspring:

> *Before giving birth, they clean themselves with a specific herb called 'seselis,' which has the property of making the uterus more flexible; and after giving birth, they mix two herbs, namely 'tamnus' and 'seselis,' which then reach the fawns: for a specific reason, they want the first drops of milk to be soaked with these herbs.* (Pliny VIII: 112).

Curiously, the botanical knowledge of the deer is similar to that of their enemy, the snake, which often appears in mythology as a *connoisseur* of medicinal plants or magical herbs (see Gilgamesh). At the end of his section on the stags, Damaschin makes a sincere attempt to explain a well-known behaviour of the animal, not interpreted in a religious sense as one would expect but comparing it to humans and seemingly taken from Richard de Fournival's *Le Bestiaire d'Amour*: *And when it wants to mate with the female part, it carries the male part and puts ivy and other herbs on it. And thus, it carries them together and makes it look more beautiful and joins them together* (Anonymous 2001, 87). He clearly

describes a typical behaviour during the rutting season, when stags entangle their antlers with vegetation by digging through bushes with them, either testing their strength on young trees or marking their territory. Pliny's animal reaches the bestiary virtually unchanged. The stag lives longer than any other creature[6] and seeks snakes to drive them out of their holes and consume them (Pliny VIII: 119). Then it runs to the spring[7] to quench its thirst and neutralise the venom.

Christian tradition was quick to interpret the need for water as the believer's thirst for God because, ultimately, in all writings of the bestiary type, animals are not an end to themselves, but their role is rather teleological, to show humans the divine plan. *For since the creation of the world God's invisible qualities—his eternal power and divine nature—have been clearly seen, being understood from what has been made* (Romans 1:20). The snake is equated with the sin that hides in a crevice of our soul and can only be removed from there by Christ. Although none of the Romanian versions of the *Physiologus* mention the practical, talismanic value of the true stag, we find it as such in one of the earliest Latin translated versions, which tells us that *in the house where there is deer hair, you will not find the snake (dragon), nor where its bones are burned* (Anonymous 1979, 58). The metaphor of the drinking deer also appears in the Bible, where this creature is generally associated with freedom, speed, and purity. At last, in Jewish and Phoenician art, they are also a preferred theme.

A symbol of the Sun, life, and prestige

As a symbol of natural regeneration and the Sun, the stag (especially the golden one) can become, as in Cambodian mythology,

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[6] Wild stags live around 14 years and even a bit more in captivity.

[7] According to other variants, the animal pours water in the snake's den instead of blowing air.

harmful due to its excess of fire. The belief in the stag as a bringer of drought can also be found in ancient China, where it can simultaneously symbolise longevity and abundance. If we were to summarise its essence, it generally appears as a burning and luminous being. Coincidentally in mediaeval European medicine, its meat was recommended as a remedy for fever, and the animal was considered invulnerable to fever itself. In the East, Hittite gods are depicted riding stags. The Kurds believe that killing a stag brings bad luck. The art of the Asian steppes is full of beautifully depicted animal representations, and stags are the most frequent among them. The Mongolian deserts are scattered with menhirs decorated with galloping deer, associated with shamanic practices and a partially zoomorphic supreme deity (Fitzhugh 2009, 72-88). These stag petroglyphs often mark kurgans made of stones called *khirigsuur*, which connect them, at least in part, with the world beyond. In Altai, figures of deer have been found on Scythian fibulae, saddle decorations, combs, shields, jewellery, head ornaments for sacrificial horses (Fig. 4). In other words, psychopomp horses were buried with stag masks in order to represent real stags. Even more interesting for our study is the tomb of a young woman from the Pazyryk culture, dating back 2500 years, containing a well-preserved mummy in permafrost, nicknamed the "Ice Maiden" or "Princess of Ukok." Not only were stag images found on her coffin alongside snow leopards, and her wig had a cocarde with a deer, but the girl herself had beautiful animal tattoos, among which a fantastic stag stands out, with flowering antlers.

We also find them involved in the symbolism of Western power, perhaps because their antlers foreshadow a crown. One appears at the top of the sceptre discovered in the treasure of Sutton Hoo, and the name of the great banquet hall in *Beowulf*, *Heorot*, means "Stag's Hall." In the ancient Norwegian *Edda*, four deer, Dáinn, Dvalinn, Duneyrr, and Duraþrór, graze on the branches of the cosmic tree Yggdrasill tree.

The Celtic god Cernunnos/Carnonos (lit. The one with horns) is portrayed as a man wearing antlers on his head, sometimes surrounded by animals, a figure of shamanic (Russel 2012, 23) appearance, or possibly a chthonic deity of nature and animals. He also figures on the famous Gundestrup cauldron, which, although found in a peat bog in present-day Denmark, shows traces of Balkan silversmiths' craftsmanship, most likely Thracian, perhaps even originating in present-day Bulgaria, which makes it even more interesting for the present study of deer mythology in the Carpathians (Bernhard 2018, 26-41).

The deer as a totem

The veneration of the deer in Asia seems to be almost universal, from the animal messenger of the gods in Shintoism to the totemic legends of the steppe, or the Ural Mountains. Cingiz Aitmatov tells in his novel *The White Ship* the story of the golden she-stag, which is directly taken from the local folklore of the Kyrgyz people. The stag-mother, *Bugu*, is the totemic parent of the tribe. Like the Capitoline she-wolf, the she-stag adopts two children (because she had lost her own offspring), a brother and a sister, and nurses these unique survivors of the massacre carried out by an enemy tribe against their family. Over time though, the generations that followed them began to violate the taboo of hunting these ancestral stags, and the beasts hid in increasingly remote and inaccessible places. It is noteworthy that we are dealing with a female deer (hind) wearing antlers, which it should normally lack. This detail is not lost on the Siberians, who are familiar with the surrounding nature; it is intentional, imbuing the creature with androgynous qualities. For the ancient Evenks, the mother of animals, *bugady enintyn*, was a miraculous stag that created humans and animals and was as well the one who devoured them at the end of time (Champouillon 2012, 23).

The deer is an important animal in the totemic pantheon of Native Americans, seen as essentially solar animals. Their calls awaken the celestial body every day and bring it into the sky. It is a typical case where ethology becomes mythology, as the stags roar at dawn, when the cold morning air can carry their cry far away. The antlers also remind us of the Tree of Life, the cosmic tree, the sacred pine. Hopi, Pueblo, Timucua, Pawnee, all hold the stag in high regard. A fragment of a Pawnee song says:

> *We call upon our children. We tell them to wake up, we tell them that all animals have awakened. They come out of their hiding places where they slept. The stag comes from the thicket where it dwells, leading its young ones toward the light of day. Our hearts are filled with joy* (Chevalier and Gheerbrant 1994, 291).

The initiation deer and the hunting of sacred animals

In the former Roman space, where it had not been held in high regard (with exceptions, of course, like in the case of the goddess Diana), the symbolism of the stag begins to be rehabilitated with mediaeval Christian mythology. It becomes the guiding animal that lures the hunter deeper into the unknown, namely the forest. The hunt now becomes an initiation. Only the hermit and the hunter/hero venture there, both departing from the natural order of the human world in search of glory and of mystical experience. Out of all forms of hunting, the Church opposes the least hunting the stag, the favourite sport of noblemen. For Gaston Phoebus, the author of the famous treatise *Le Livre de Chasse*, this is the ultimate challenge, cunning, swift, always alert, and above all, very useful, an animal with medicinal properties (Klemettilä 2015, 78) from which numerous remedies are obtained. But it can also prove fatal to the pursuer: *Après le sanglier le médecin, et après le cerf la bière* After the wild boar, the doctor, and after the stag, the coffin, Phoebus writes (Klemettilä 2015, 33). Stags start to

appear in heraldry as a sign of prudence and constant vigilance, lovers of music and justice, and the alchemists symbolise the philosophical mercury through it (because it is swift and agitated). Richard II's coat of arms features a white stag wearing a crown as a collar. The quest thus becomes a spiritual one, especially in the light of Christian hagiographic legends of hunters becoming saints after encountering the divine stag. The beast evolves into a Christian symbol, like the pelican and the unicorn in mediaeval imagery. In Romania we find it on Radu Cantacuzino's coat of arms, on the coat of arms of Gorj County, Baia city, and on the Cesianu family's seal (Szekely 2015 2012, 395).

Paradoxically, although in the mediaeval period, the deer became a symbol of wilderness with sacred valences, it was often tamed, almost domesticated. Stags were raised in enclosures, their fawns o had surrogate mothers from among the livestock, they were branded just like cows, and a few rare references seem to indicate that deer milk was sometimes used to make cheese (Russel 2012, 272). Interestingly, such a desacralization of deer did not diminish the prestige of their symbol in any way.

In fact, the hunting of sacred animals comes from an ancient and very vast legendary tradition, which arose independently in several populations and where the hunted creature acquired the role of guide, often supernatural. Bears, wolves, bison, and especially oxen, deer and deer played this role of guide that brings a population to new territories and thus explains ethnogenesis. The stag and stag are important in this regard to the Poles, Hungarians, Goths, Cabaret, Indians, extending their legendary thread into Roman, Byzantine, Italian, German, French and other writings. Eliade etymologically emphasises the connection between the game and the one who shows the way in a diary entry where he reminds us that the Sanskrit *marga* =

road, path (मार्ग)) comes from the root mrg meaning "to follow the game"(Spinei 2014, 115).

Sozomenos and then Iordanes record the passage of the Huns towards the territories of the Goths following a stag (sometimes a doe/*cerva*) that leads them across the Meotida Lake "(Spinei 2014, 76). The legend also appears in the Moldavian chronicle of Nicolae Costin (via Polish sources), only that this time the deer crosses the Volga (Spinei 2014, 81). In Simon de Keza's *Gesta Hunnorum et Hungarorum*, the settling of the legendary ancestors of the Hungarians, Hunor and Magor, is done by chasing a white stag or a doe. Moreover, the mother of the two is Eneth, whose etymological origins suggest a totemic myth from the old *eney*, meaning hind, according to the Hungarian medievalist Gyula Kristó (1996, 120). This animal mysteriously disappears after taking them to the other shore (Spinei 2014, 89). In the 14th-century Hungarian manuscript *Cronica Pictum*, Ladislaus I of Hungary and his brother King Géza I of Hungary, while looking for a site to build a church, see a stag (sometimes a white one) with antlers full of burning candles as an angel. The beast then disappears by throwing itself into the waters of the Danube (Spinei 2014, 90). We also encounter episodes with such miraculous deer in the legends of the Poles and, as we will see, the deer will appear in the Romanian carol in the role of the founding sacrifice, sometimes of the community, sometimes of the ethnicity itself. This shy animal can only tolerate the proximity of the purest among people, and, just like the unicorn, which only rests its head in the virgin's lap, the stag will come to be caressed by a saint, Saint Giles, a hermit from the 6th century adored in the western space, quite popular in mediaeval Hungary, from where his cult also reached Romania (Szekely 2012, 249). The life of this animal lover, who would have been nursed in the wilderness by a doe, is beautifully depicted in the Sighișoara Polyptych (Szekely 2012, 261). Similarly, Saint Edern is always represented riding on a deer/stag that

sought refuge from hunters in the monk's cell and never left his side again. Brother Robert of Knaresborough, through his sanctity, draws wild animals close to him, and it is said that he managed to harness several stags to the plough, just like oxen (Klemettilä 2016, 209). Then we have the hunter saints (who later become patron saints of all hunters) Eustace and Hubertus (Fig. 5), with almost identical stories, hundreds of years apart, and whose cult became very widespread in Western Europe. The first of them, Eustace, is the Roman general Placidus who converts after seeing a stag with a cross on its forehead while hunting with his retinue. The animal speaks to him on a mountaintop, telling him that it is Christ himself. Eustace is martyred along with his family when he refuses to return to the old pagan beliefs. Popular since the 7th century in the Byzantine space, it became known only later in the 12th and 13th centuries in England and France. Evidence of the presence of the cult in Romania is one of the frescoes in the Argeș Monastery, commissioned by Neagoe Basarab and attributed to the painter Dobromir, where we find Eustace holding a small stag in his right hand. According to Mircea Eliade, his story may be a Christian reinterpretation of Sanskrit tales about gods or demi-gods turned into deer, passed through Arabic and Pahlavi versions (Eliade 1995, 161).

The second hunter-saint is Hubertus, and his story seems to reuse the hagiographic history of Eustace. Leaving for a hunt on Sunday, instead of going to church, the nobleman Hubert, son of the Duke of Aquitaine, chases a stag. The animal stops, and in a halo of light, it confronts the pursuer, displaying a cross between its antlers. Both legends appear sometimes involving white stags. We only need to change the religious register to see that our Christian legends continue, in fact, the mediaeval Celtic tradition, where fairies and not Christ change into fawns/deer/stags and reveal themselves to their hunters to be spared. Then, the fact that we celebrate St. Hubert on November 3rd

recalls the pagan celebration of Samhain when the boundaries between worlds become thinner, and the intermediary who carries us beyond in this case is often an animal. Marie de France, in the 12th-century poem titled *Guigemar*, relates the adventures of the eponymous knight which resemble the adventures of saints Eustace and Hubertus. Following a white stag with golden antlers (as we have seen, a typical characteristic of miraculous deer), the young man eventually manages to wound it, but the arrow returns to him and strikes him back because violating such a taboo. Harming the sacred beast brings immediate repercussions (Walter 2005, 55). Such proximity to the sacred is not without its dangers, as evidenced by the episode of Basil I, also known as Basil the Macedonian, who goes after a giant stag (again, an animal that stands out from the rest of its species) which he fails to kill. The animal turns against the hunter and thus kills the founder of the Macedonian dynasty (Szekely 2012, 81). In Romanian fairy tales, just like with Hercules' labours, the hero receives an apparently impossible mission from his enemy, namely to hunt an enchanted stag and bring its skin along with its head (that is encrusted with precious stones). As it often happens with magical animals, they are not only difficult to kill but also endanger the hunter himself, and here the beast can kill the hero with just one look (Bîrlea 1976, 100) not unlike a gorgon.

We have, of course, the deer as heavenly aid given to various Christian monarchs in times of crisis. According to Grégoire de Tours in *Historia Francorum*, during a military campaign against the Goths led by Alaric, Clovis I, the unifier of the Franks and founder of the Merovingian dynasty, prayed to Christ to show him the way to cross the Vienne River. A deer appeared to him and showed him the shallower way through the water. Similarly, the Burgundian general Mummolus had a wild animal show him the way to cross the river Iser. The legend is repeated, in broad lines, with the Franks pursued by Saxons, and a roe deer leads them across the Main River (Eliade 1995,

145). This unusual association is reserved, as we have seen, to the chosen ones, founders, kings, heroes, and saints. Romanian historical legends also include such associations, where Ispirescu talks about the Wallachian ruler, Michael the Brave:

> *[...] He had two stags that would not leave their lord for anything. They accompanied him in all battles. [...] One of them was hit by a pagan bullet and died immediately. The other, seeing that his companion no longer moved, and blood gushed from him, kept circling around bellowing heavily. Looking at his lord, tears streamed down its face. Then, raising its eyes to the sky, it stood like that for a while, as if it were praying. Afterward, it rushed into a nearby forest and was never seen again. They say that tears streamed like a river when it left its lord and companion* (Ispirescu).

We find a similar testimony in a court chronicle from the time of the mentioned ruler (the first such document in the region, as no Slavonic chronicle has been preserved south of the Carpathians). In his testimony, Baltasar Walther also used stories circulating in the oral tradition and pasted them to official ones. The two battle stags are mentioned again: *They stayed especially near the lord's tent; they sat before him in wars and battles, marching bravely, sometimes before him, sometimes alongside him. Neither the noise of the bombs, nor the flashes of the cannons frightened them, but hearing the roar, they rose to their feet and stood watching for a while* (Piru 1962, 42).

Since we spoke about harnessed stags, we must mention that deer are relatively easy to tame, and archaeological and historical evidence speaks of such animals, not necessarily domesticated but surely tamed. François Poplin cites the case of an inhumation in Mont-Gravet. In a grave the size of a human, a stag skeleton was found, deposited there during the Iron Age. The discovery itself does not surprise us, as we have already seen the funerary overtones of this animal in other

cultures too, but this stag's jaw is remarkable in bearing the marks of a bridle (1993, 533). Furthermore, its antlers have been artificially modified. The secondary branches were cut off, leaving only the main axis as a curved and long stem. It is almost impossible to say today why such cosmetic changes were made and what their significance may be without having the broader context. It is possible that the stag was prepared to resemble another animal with straight horns instead of antlers (perhaps an antelope?), or perhaps they wanted to transform the old deer into a young buck that wouldn't have yet accumulated branches on its simpler antlers. Another case from Saxony, at Rullstorf, brings us yet another buried stag with traces of a bridle, alongside three horses (Poplin 1993, 537). We should not overlook the company of the horses in this case, as we have seen among the Scythians, they are symbolically related to deer and sometimes even completely overlap.

Whatever the case may be, harnessed deer can be found even later, in Antiquity. For example, in Aurelian's triumphal march to Rome after defeating Queen Zenobia of Palmyra, four stags pulled a cart said to have belonged to the King of the Goths (Poplin 1993, 535). More recently, the German Prince Pückler and King Henry II of France would have used several stags harnessed to their carriages and chariots, just as Ispirescu recounts about Michael the Brave. There is no doubt that the sight of a carriage pulled by pairs of stags would have been an image worthy of any king, a supreme symbol of status, an attribute fit for gods and monarchs. Deer have been often tamed. Yet, as Poplin remarks, they are better off wild, and their aura somewhat fades, losing their miraculous nature when too close to humans. They were in a sense intentionally left wild, although they could easily have

become what dogs are to wolves or pigs are to boars (Poplin 1993, 538)[8]. The legendary animal is said to survive for hundreds of years, being the most long-lived in the forest. It witnesses generations of humans, generations of kings, and its mere appearance demonstrates the legitimacy of the new crown. It is said that stags have been seen centuries after Alexander the Great put golden collars around their necks, and King Charles VI of France encountered one wearing such a collar on which a faded inscription could barely be deciphered: *Caesar hoc mihi donavit* / Caesar gave me this collar (Pastoureau 2011, p. 79.).

The roe deer used to be a ritual gift during winter holidays in the local Middle Ages, and, similar to Western Europe, stag hunting was reserved for the aristocracy, rulers, or heroes in old Romania. They are the privileged groups allowed to explore the unknown, far beyond the limits of the human world, in inaccessible places. Chasing the stag through the wildest of places, climbing the mountains where the firs grow small, a mythical path is recreated, an ascension towards the sky, experiencing there the sacred, the trance in meeting the old gods, a *regressus ad originem*.

In Romanian lore, the untamed stag sometimes descends from the mountain into the hero's courtyard, tramples the fences, eats from the orchard, and makes a crown of twigs for itself. In other words, it challenges the hero to follow it into the forest, to hunt it, for it is an invasion of the sacred into the fragile profane organisation of the human world: *The deer laughs as it frolics, The deer laughs with great pride, as it fears not the young hunter.* Once killed, its body is used to build the house, and its meat is consumed at a grand wedding feast. In other words, it posthumously infuses the entire human world, revitalising it

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[8] *Le cerf est l'exemple même d'un animal que non seulement nous chassons, mais encore nous n'élevons pas. C'est-à-dire que nous refusons les possibilités de familiarité, de domestication qu'il nous offre, pour mieux le maintenir dans son état sauvage.*

with the sacredness of the wild. This winter solstice song is also found in the Polish tradition, where the antlers are made into coat hangers, and its fur into a coat etc. (Caraman 1983, 119). And if we equate the house, the hearth, with civilization itself as its summary, then the stag becomes the totem from whose sacrifice we all derive:

> *Out of its flesh / They made the wedding, / Out of its skin / They covered the house, / Out of its blood / They painted the house, / Out of its bones / They made the windows, /Shiny windows, / Gilded with gold;/ Out of its antlers / They made little gates, / Arched gates, / Down to the gardens* (Coman 1986, 159).

Another type of carol where this time the sacrificial victim of founding is *The bevy* (*of hinds*) (Rom. *Droaia de ciute*). In the bevy that is about to be ambushed by the hunter, there is a mischievous, sentient female deer, a prophetess, and she manages to foresee her fate. The sacrifice is followed by painting the house with blood and interestingly so, it appears as such among several distant cultures, like the Sudanese tribes, where the young man, after killing his first animal, smears the walls of the cave with blood. The bathing in the blood of the fantastic stag slain in the Romanian tales (Harap Alb) seems to be also a trace of an initiation rite not so different from the Mithraic one. In fact, a whole series of Mesopotamian cults, after previously equating the victim with the god/demon, sacrifice it for the regeneration of the world using the animal blood as a sort of baptism. We cannot exclude that such details have reached the fairy tale precisely via Mithra's cult, which in Roman Dacia was also popular (Oișteanu 1980, 98-100). As reminders of the founding sacrifice or as objects with apotropaic value, antlers are kept and hung like trophies in many Romanian houses, especially in the northern part of the country. Returning to our customs, the animal can also appear as the carrier of the bride to her wedding, sitting her in a silk cradle between the antlers, or influenced by Christian tradition, carrying even the Infant Jesus. Just as in Christian Irish legends where

traces of Celtic mythology have survived, some holy characters disguised as deer/stags appear in Romanian carols, where the miraculous creature reveals its identity as the transformed Saint John or even the Virgin Mary: "*Under a bush plays a very proud beast [...] / Stay Sun, don't shoot, because it's not who you think it is, because it's the holy Lady Mary and she has given birth to a young son*" (Herseni 1977, 172).

The attitude towards this species has varied over time, and in the Roman era, in contrast to mediaeval Europe, the hunting of deer was not particularly favoured by the patricians. It was rarely hunted and associated with wild and inaccessible places, far from civilization. Pastoureau notes that killing a deer brought no glory upon the hunter, and because of its sensitivity, the animal was considered rather timid, preferring to flee at the slightest sign of danger, galloping in the direction of the wind so as not to leave a trail. Cowardly Roman soldiers who fled from the enemy in the middle of the battle were called *cervi* (stags), and therefore, deer hunting was more often reserved to peasants, while nobles or urban dwellers usually regarded it as beneath their dignity (Pastoureau 2019, 76). However, this does not mean that the practice was entirely absent; it's just that the status of deer hunters may have been different from that of the mediaeval period. In Romania, according to Gheorghe Nedici, deer trophies from the Roman period were found in fortresses in Turda, Cluj, Alba Iulia, Gherla, and others (Nedici 1940, 589). Another testimony to the late importance given to this game is the care taken by European monarchs to populate and maintain their hunting estates. For example, as early as 1157, there is a document in which Geza II orders salt from royal saltworks to be released to be placed in the ground (salt enclosures) where deer usually gather: *Cedentur sales qui, ubi cervi congregari* solent, in terra poni debent (Nedici 1940 590).

Since ancient times, deer hunting gains a sacred, ritualistic dimension, as we learn that in Gaul, upon returning from a hunting campaign, men and women cover themselves with the skins of the slain deer and dance for several days (Clébert 1995, 69) at the beginning of spring when vegetation regenerates. It is also the case in the Indian epic *Ramayana*, where the demon Marica, transformed into a golden stag, lures Rama away from Sita so that another evil spirit, Ravana, can kidnap her. Centuries later, this story is repeated in the Balinese *Kecak* dance, and the role of the golden deer is played by a dancer. Various other Asian deities undergo transformations into deer, such as Saraswati in Hinduism or some *bodhisattvas* in Buddhist *Jataka* tales. Deer are a common figure in masked dances of Tibetan Buddhism. In Hindu literature, there is a separate category of fantastic deer with eight legs, the *sharabha*. As we have seen, we encountered one such creature on the Thracian cups from Agighiol, most likely an inherited Indo-European motif. These supernatural creatures are most often not mere animals but disguised gods or demons (skr. *asura*). By killing them (as in the story of Brahmadatta in the *Dhūmakāri jātaka*), the hunter can become a true king of the gods, but this is also a spiritual test. Sakka, the king of the gods, tests the man, but Brahmadatta refrains from taking such power, being a virtuous man (Eliade 1995, 158). The golden[9] nature of these animals seems incompatible with the coarse human world, be they kings or queens, as *Mahāsamghika* tells us. The queen of Benares covets the skin of a golden flying stag, and when it is finally caught and embraced by the woman, it loses its radiance under the weight of her sins, merely by touch. Once transformed into an ordinary animal, she sets it free (Eliade 1995, 159). Stags can serve as sacrificial offerings in other ways, too, as seen in an early Romanian cosmography copied by Costea Dascălul in the late 1600s, called *The*

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[9] Motif B102.3. B102.3 cf. Thompson.

tale of the realms of Asia. The Christian legend here tells that somewhere in the land of the Georgians, on the eve of St. George's day, the church is locked, and the next morning, when all seals are broken, the priests find a bull or a stag inside, which they sacrifice, and everyone partakes in a Eucharist-like meal. The origins of this legend are difficult to trace back, reminiscent equally of Mithraic bull killing and the cult of the Caucasian goddess K'op'ala – one who transforms into a stag and is associated with the celebrated saint (Velculescu 2018, 282, 283).

At other times with traditional Romanian weddings, the oration can take on hunting overtones. The image of the chased doe masks that of the bride. In Sibiu County, these hunters ask for their bride-prey which is "*Talking, not mute / Wearing red boots / With black-clad shirt*". However, the mechanism does not seem to be only a metaphorical one in which the overly aggressive demand for the girl from her parents is avoided. In similar texts, things take a fantastic turn and the groom's group of lads come to the girl's house after declaring that they travelled far and wide hunting, until they found the "*track of a beast*". No one has ever seen such a track, some say it's a deer, others say it's a fairy (transformed into a deer). Whatever the reality behind her, she seems like a polymorphous being of sorts. After shapeshifting, the fairy/bride arrives in her garden disguised as a flower, a flower that the groom wants to pull out from the roots and take home, with silver pickaxes:

> *And at sunrise/He went hunting/He hunted up north/And all the way to the west/When the sun went down/By a great road/We saw the trace of a beast/Some would say that it is a trace of a fairy/Let it be a crown for the bridegroom/Another said it was a deer track/Let her be the bridegroom's wife* (Meițoiu 1969, 291).

Deer in winter solstice songs

In a way, the newly established Christianity in the first millennium had no choice but to adopt and reinterpret a series of

totemic traditions already existing at a pan-European level, which stubbornly persisted within the population. Chrysologus of Ravenna, who preached in the first half of the fifth century, harshly criticised processions with masks of wild animals (*ferae*). The masks were generally viewed with suspicion by the Church. Masking meant disguise and lies, activities considered devilish, and the objects in question were part of the toolkit of the shaman and the sorcerer, which needed to be suppressed. According to Walther von Wartburg in the *Etymological Dictionary of the French Language*, the origins of the French *masque* should be sought in an Indo-European term that designates spirits from the afterlife that appear to people during specific periods of the year (Bîrlea 1976, 82).

Among the customs, the *Cervulus* or "Little Stag" stands out. The animalistic character seems to have been very popular and was mentioned for the first time even earlier, in the writings of Bishop Pacian of Barcelona in the year 370. He expressed great dissatisfaction with the behaviour of his parishioners when they dressed up as stags. Equally, he was upset about his own failure because, while giving this pagan game to the faithful as a negative example, it seems that he inadvertently rekindled their appetite for it: *Tota illa reprehensio dedecoris expressi ac saepe repetiti, non comprensisse videatur, sed erudisse luxuriam... Puto nescierant Cervulum facere, nisi illis reprehendendo monstrassem* meaning "All this censure of inappropriate behaviour that I have done so many times does not seem to have been understood as a rebuke, but rather as an invitation to indulge... I think that if I had not reminded them how not to perform the Little Stag, they would not have known how to do it anymore" (Twycross and Carpenter 2006, 46).

Saint Ambrose of Milan, although mentioning it only briefly, provides an important clue that the custom takes place at the beginning of the year: *in principio anni, more vulgi, cervus allusit* (at the beginning of the year, according to popular custom, the stag frolics). Almost two

centuries later, the custom of dressing up and dancing as the Little Stag, *cervulum facere*, seems to continue unabated. Caesarius of Arles mentions it as follows: *In ferarum se velint habitus commutare. Alii vestiuntur pellibus pecundum; alii adsumunt capita bestiarum, gaudentes et exultantes*... (They want to transform themselves into animals. Some dress in the skins of domestic animals; others put on the heads of wild animals, rejoicing and exulting). We also learn that the dancers are a travelling group: *ante domos vestras venire non permittatis* (do not allow them to come over to your homes), which means that doing the Little Stag is a kind of New Year's carolling, just as it still happens today Romanian villages. In the year 1012, the custom persists, and Burchard of Worms was prescribing thirty days of penance for those who danced as the Little Stag. According to J. R. Conrad, *in the 7th century, the Bishop of Canterbury decreed that anyone who would disguise themselves as a stag or a bull on the calends of January would suffer a three-year ban because this practice is demonic* (Oișteanu 1980, 73).

Surely, such celebrations were not well regarded by the Church in Eastern Europe either, but they certainly managed to survive here much longer than under the attention of Catholicism[10]. For example, Adrian Fochi records some responses related to a questionnaire about winter solstice rituals such as the one called *brezaia*: *[...] people stopped doing it about fifteen years ago because it's too scandalous. People used to do it at Christmas and for St. Basil's Day* (Fochi 1976, 337). Although the attitudes of the clerics are similar here too, the time gap between these related customs is enormous, and while in the West repression (at least in writing) began much earlier, the collection of questionnaires published in Romania dates back to 1976, which still confirms the

[10] Of course, Eastern European space is not an exception, and we still find Christmas/solstitial "goat" related ritual dances in Scandinavia among others, known as *Julbock*. There too, they have been documented scientifically by ethnologists starting the 19th century, but with a much older origin most likely.

survival of the custom in modern times. He also reports further on *turca* (another similar cervimorphic avatar, with horns and a wooden articulated head, operated by a dancer):

> *It looks like the devil [...], it's been around since King Herod killed five thousand infants. He didn't know how to get the children and the women with children out so he could kill them. He made an ugly man dressed in goat skin, with horns on his head and rooster feathers on top, a bell on his back, and a big mace in his hand [...]. Whoever dresses as the turca loses their sanity, cannot go to church for six weeks; whoever dies during those six weeks is not buried in the cemetery, and no bell is rung for him*. (Fochi 1976, 337)

The group of dancers carolled, indeed, the whole village, but they bypassed the church and the priest's house. These masks were feared not only by the good Christian, but also by the officiant who had to observe some magical rules regarding them. Objects already imbued with unseen influences, they remain a kind of gateway to the other world, so that when he takes off his mask, the *turca* dancer puts it upside down, so that the devil won't be able to wear it instead (Herseni 1977, 53). Herod's story is, of course, a newer layer of Christian mythology meant to discourage the remaining pagan rituals and certainly a very late addition. Nevertheless, this remark is no less important because it precisely captures the mechanism through which an early cult is assimilated by a more recent one, in a negative sense. Particularly noteworthy here is the prohibition of Christian burial, as if the officiant had been contaminated for six weeks, even possessed by the spirit of the totem-stag/goat. The dancer loses his wits, that is, he is no longer himself; he becomes inhabited by something foreign to him, just as the Tungus shaman summons the spirit of the reindeer to inhabit him. Specific purification rituals are therefore required after wearing these masks or after participating in their procession. In other

places in Romania: *In the past, those who danced the turca […] had to bathe afterwards in untouched water (meaning they had to self-rebaptize) because they believed that they had become possessed by a demon* (Oișteanu 1980, p. 73). The phenomenon of trance in the case of the mask-wearing dancer is widespread. We find similar forms in all rituals of shamanistic or post-shamanistic origin, from those that are still alive today in Arctic populations to those assimilated by a second religion. Under religious pressure, ultimately the stag dance became increasingly rare. However, it is not unique and blends with other similar New Year rituals as seen before, such as the turca, a similarity noted by Dimitrie Cantemir in *Descriptio Moldaviae*. Also known as *borița* (Fruntelată 2009, 85) (a diminutive form for wild cow[11]), it presents itself as a masked dance too, with a horned animal head supported by a pole and adorned with bells, while the dancer's body is hidden under a colourful blanket on which various ribbons, tassels, and handkerchiefs are sewn, just as the Flemish miniaturist Jehan de Grise depicted his stag as we'll see further on. (Fig. 7).

One should not be confused by the presence of the goat effigy in these dances, or by the name itself, because it does not refer to the domestic goat, but rather to a doe which is called the same in Romanian in a diminutive form (Rom. *capră-căprioară*). This "little goat" dances seem to have survived better than the stag dances themselves, though fundamentally, they refer to a similar entity. The meaning is the same – for example, in Poland we also have a goat dance (*koza*) whose role is fertilising the soil. There too the Church considered it of demonic origin. Similar situations can be observed among Slovaks and Slovenes. In Hungary, the goat dance (kecske maszk) seems to have

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[11] *Turca*, *brezaia* and *borița,* are not quite distinct. Although they all seem to be a form of stag or horned beast, their names allude to the aurochs (*Bos primigenius*), a species now extinct that might have lent its identity to the stag in later times.

come from Romania and is still alive today in Hajdu County. It is also present among Serbs as *kapra* (Vulcănescu 1970, 35). These ambiguities arise from the fact that zoo mythological/ zoo mythical traditions undergo various hybridizations over time, as seen in the *Mari Lwyd* custom from Wales, where the preferred figure becomes that of a horse. Moreover, the stag is also referred to as a bull, his mate as a cow and offsprings are called calves, leading to even more blurry identity of the intended animal. The antlers/horns are a ubiquitous element, while the identity of the animal bearing them may change. In the late feudal period, the Aromanians in Klissura referred to those who danced The Stags as *aruguciari*, a term likely derived from *rogaciari*, meaning "horn-bearers" in Slavic, where "rog" (*рог*) means horn (Vulcănescu 1970, *35*). In support of this hypothesis, there is a carol from the Ukrainians, where the stag is likened to an aurochs:

> *Take with you silken nets / And shiny arrows / To catch a wild beast, / A beast like a stag, a beast like an aurochs.* (Caraman 1983, 42).

It may be the case that in Wales the ritualistic stag morphed into another animal, but with similar symbolic functions, namely the horse, with which it has been associated in better-preserved dances like the *Mari Lwyd* (Grey Mare) and *Padstow 'Oss*, although it is difficult to trace them earlier than 1800's. However, the *Abbots Bromley Horn Dance*, a dance that still uses real reindeer antlers (yet without a covering costume), suggests, at least in part, a certain continuity of cervimorphic rituals. Several pairs of these antlers passed down from generation to generation and dated with C^{14} have been found to originate from the 11th century (Renay 2019, 6). Finally, in Spain, we have masquerades with horse skull masks (*gomia*) too, as part of the *El Antruejo* carnival, which takes on a similar form to the Welsh tradition. Interestingly, a few marginalia from Western mediaeval manuscripts illustrate the *cervulum facere*. They do so without providing details about in writing.

The drawings at the edge of the text, when not illustrating the adjacent information or functioning as purely decorative and amusing scenes filling the empty spaces on the page, describe easily recognizable everyday life moments for the reader, a kind of precursor to genre painting. The presence of the Little Stag here attests to its notoriety at that time. We find it in one instance, as part of a masquerade alongside other animals, all under the gaze (and threat of a beating, undoubtedly) of an oversized monk looking down on them. Out of the five participants, three wear animal masks: a boar, a rabbit, and at the forefront of the group, a stag dancing cheerfully (Fig. 9). With no direct connection to the story, this illustration complements the text of the *Romance of Alexander*, in a manuscript dating back to around 1400, currently held in the Bodleian Library collection.

In the second example, also as *marginalia* (attributed to the Flemish illustrator Jehan de Grise), we again observe *cervulum facere* in yet another manuscript containing the *Romance of Alexander*. The dancer is accompanied by a drummer playing the flute. The stag is now presented not only as a mask but as a complete costume, with a pole supporting the false head adorned with antlers, which the man holds with his hands, hidden under some fabric of a feathery appearance. His face discreetly emerges through the chest of the effigy, through a small opening, allowing him to see where he's going (Fig. 7). Once again, the stag's dance appears identical to the one we are familiar with for the New Year celebrations (Fig. 13). Finally, the last example I chose to highlight the presence of the Little Stag in the mediaeval West is also marginalia for Robert de Boron's Arthurian Romance. Here too, we observe the typical costume for *cervulum facere*, with a blanket covering the dancer entirely and the same opening for his face somewhere in the animal's chest. With an imposing silhouette clearly taller than that of a man, the deer's head is supported by a long pole. Music is still present,

and the horned character follows a piper setting the rhythm of the dance.``

Fertility rites

In winter solstice songs where a hind is hunted, the idea of fertilising the field through its sacrifice appears probably as a reminiscence of an ancient ritual long forgotten:

> *You cut off its beautiful head, / I gave the field a gift, / And the earth receives its blood.*

Whether regenerative energy is restored through the blood of the female deer or the invoked male, called to jump over the field to fertilise it, the contact of the ploughed earth with the wild animal, seems to indicate that the man-made field being somewhat artificial, requires a part of the primal vigour to yield crops. Be it the stag dance, the goat dance, or in the one called *brezaia* the animal is killed and buried. One of the dancers becomes the priest, and another the mourner. In some places, the custom is called "burying the Christmas," and when the animal's effigy is absent, a log wrapped in a burial cloth can be buried instead (Caraman 1983, 510).

Getting back to the stag's image, not only do its antlers remind us of the universal tree functioning as an *axis mundus*, but sometimes this tree even appears to grow out from the animal's forehead, like the crucifix in the mystical visions of Saints Eustace and Hubertus. A New Year carol from Argeș region in Romania sounds like this:

> *The little deer was grazing, / In its antlers, it bore / A small fir tree / With a star on its crest./ The deer was grazing, / And the fir tree was growing / Big and proud, /Into a beautiful fir tree./ In the fir tree, birds were chirping, /On its branches, stars were twinkling./ Wherever it walked,/ Night turned into light, /The dark sky, /The adorned sky.* (Vulcănescu 1987, 510).

Here, maintaining a solemn, sacred tone, the stag mentioned in the carol transforms into a creature of cosmic proportions, like a deity, oversized, with trees growing from it, flocks of birds in them flying around, and shining bright in the middle of the night. One wonders if all this symbolism of plants growing from its body might, at its origins, be an observation of real animal ethology, amplified, retold, interpreted, and transferred into legend. Stags while walking and rummaging through the forest, entangle ferns, moss, and branches between their antlers, sometimes accumulating whole thickets of vegetation hanging from either side of their heads, as if sprouting from there (Fig. 12). The analogy between the dying goat and the passing year with the promise of spring captures the essence of our ritual in Moldavian carols as well. Not accidentally, the animal is left on the earth, to which it must give back life by offering its own:

Let it die on the ground to die, / To be reborn in the spring! / Spring is our mother, / Take the snow off the hillside,/ And the snow off the house,/ And the snow behind,/ To clean-up the place,/ So I can lie down with my beloved. (Brăescu 2000, 52).

The accompanying well-wishing phrases during the ritual cannot be reproduced, as they are trivial and likely contain sexual allusions, common to many fertility rites and thus considered rather crude by the priests, as we've seen before. The lyrics synchronise the human world with the mating of animals around the house and in the wild, after the first snow melts, at the first signs of warmth. Their tone is somewhat similar to the traditional Russian songs called chastushki (*частушки*), which are also sung during the New Year holidays and are accompanied as well by animal figures, having sometimes even more spicy, explicit lyrics. As with many products of oral tradition, the goat songs, especially the humorous ones, undergo many modern influences and modify their text to include elements of technology, distant countries, and so on. In a way, these modern additions ensure

the natural survival of the tradition, making it easier for today's villagers to relate to the ritual while also amusing them, just as it has been done for hundreds of years, even if the sacred aspect of the solstice game is much attenuated.

> *Tza, tza, tza, little goat, tza! / I brought you from Africa, /I brought you on the aeroplane,/ I fed you with a bottle. / My goat is quite haughty, /Holding her tail on her back, /Being picky with her food.* (Brăescu 2000, 61).

Because the beast annually renews its antlers, which are closely linked to the plant world due to their appearance, stag dances appear during the New Year celebrations, a time of renewal. Surely, much of the fabulous imagery of the animal comes from observing a very natural yet no less impressive phenomenon. Male deer exhibit the fastest bone growth rate in the animal kingdom. These antlers must grow several centimetres per day for the individuals to be ready to fight in the autumn, during the rutting period. Whether they are young males with unbranched antlers (called *sulițari* in Romanian, meaning spear bearers) or old ones that have already accumulated many ramifications, their antlers will shed annually, and the growth will begin again in the following season.

The stag is both vegetal and celestial, and this is also reflecting in the names we’ve given to these ramifications, calling them branches (Rom. *ramuri*) or sometimes rays (Rom. *raze*). In our customs, an articulated wooden cervid mask completes the animal's simulacrum. The dancer is wrapped in a coloured blanket full of tassels, and ribbons. This carved animal head can be entirely made of wood, or it may have real antlers. It is a truly energetic ritual (Fig. 13), full of vitality, in which an ancestral drama is repeated every year– going out into the field and killing the wild beast, then mourning the stag, reminding us in verse once again how the houses will be painted with its blood, its antlers will become gateposts, and so on. Other times, the

stag is portrayed in these songs as being caught with a belt and brought down from the mountains into the community, and the dancer who takes on the horned character distributes gifts to the hosts to announce the abundance of the coming year. This is not the only time our creature appears in the popular calendar. Cervids mark meteorologically the approach of autumn, on August 15th when Romanians say, "the stag peed in the water." The rivers get cold from now on and are no longer suitable for bathing, once spoiled by the animal, the days shorten, and the mornings and evenings become cooler. This image is emblematic of the upcoming time, because September and October are the rutting season for the European red deer, and fighting males often mark their territory with urine. With the arrival of spring, the entry of a hind into the village is seen as an auspicious sign, a good omen (Gorovei 1995, 43). Reminiscences of these fertility rites can also be found in other European areas. The close connection between the future abundance and the present sacrifice (this time not a deer, but a goat) can be seen in a magical act practised by the French peasant, when at the end of the harvest, he decapitates the creature adorned with ribbons and other decorations, and then he wears its skin while eating the flesh (Oișteanu 1989, 96).

The psychopomp stag, a beast between two worlds

However, hunting does not always end with the death of the animal. Sometimes the deer itself promises its pursuer access to a forbidden realm, from which they will not return if they spare its life. The other world seems to be better than ours, with higher mountains, great waterfalls, where the ancient hind's archetype lives:

> *Manu, Manu, /Do not shoot your arrow,/ For I will take you, /Between my two antlers,/ With my two rays,/ I will carry you in a cart,/ Over small mountains, /With grey fir trees, /Over larger mountains,/ And with rarer fir trees, /Where the water falls./ The*

stones split,/ Where the water runs pure,/ Nobody disturbs it,/ Where the grass grows,/ No path is woven,/ Nobody treads on it./ But who will graze there?/ The purple hind,/ The mother- deer (Oișteanu 1989, 165).

The mother of all deer is not an ordinary hind - she is purple, and her atypical colour sets her apart from the rest of the herd as an original creature. Interestingly, her fur resembles another archetypal deer, the *venado azul* (blue deer) from the Amerindian tradition of the Huichol tribe in northern Mexico. Just like the Romanian deer, it is pursued by three hunters, and it leads them to a sacred place where they find the hallucinogenic *peyote* cactus (*Lophophora williamsii*). This becomes the tribe's spiritual sustenance, allowing them to access the otherworld in a trance. The similarity resonates with the Siberian tradition too, where not the deer but its equivalent, the reindeer, acts as a guide, leading the community to discover a hallucinogenic plant or mushroom central to shamanic practice.

In another version of the journey to the otherworld, the deer leads the hero to his beloved, throws him with its antlers over the mountains, and thus takes the role of a magical being capable of connecting two realms. Sometimes, in folk counterspells, we find the image of the sick person being thrown into the antlers, towards a pure world of deer and mountains, where there are no diseases. Such translocations remind us of the white horse of Fionnghuala, the beloved of the hero Oisín from Irish mythology. The white horse carries and brings the hero over the sea to and from Tír na nÓg (the Land of Youth), where time flows differently, just like in the *Land of youth without old age and life without death*, which is a well-known Romanian fairytale. Furthermore, the name of the demigod Oisín means 'fawn,' and his mother, Sadhbh, had been herself transformed into a doe by a druid.

Returning to local zoo mythology, gradually distancing oneself from the community and plunging into the wilderness proves to be a

dangerous thing and consumes the lone individual. Once one ventures too deep into the forest, it gets swallowed, and the sacred devours the man gets lost into the woods and loses his humanity, as it happens in the beautifully tragic folk song of *The Old Father*. The song tells the story of an old man. He’s got nine sons, all hunters, who he set out to pursue a great stag (once again, a deer different from the rest) and they get lost deep in the woods. Here, in the heart of darkness, the boys themselves turn into stags, sometimes through divine intervention, other times because they drank water from the deer's tracks. From a magical perspective, this is indeed assimilating the essence of the beast. Generally speaking, touching someone’s tracks or shadow, measuring them, or stealing them even by measurement are common practices in witchcraft, revealing the subtle connection between the living thing and its projection on the ground. Thus, it should not surprise us that those who drink from the animal's tracks also transform into it. Such ingestion is even more symbolically potent than eating its meat. The father searches for them extensively and finds his sons at last, calls them back home, reminds them of their mother, of the dining table full of candles, full of glasses. However, they can no longer return, and the motif of enumerating the mismatches between our world and the wilderness appears, as their antlers won't fit through the door, their hooves won't step in the ash (ash is the symbol of fire, hence the human world) and their lips can no longer drink from the glasses, emphasising a definitive rupture. They lament, saying:

> *Dear father of ours, / Go back home/ To our mother, / For our antlers /Don’t fit through the door/, Only through the mountains. / Our feet/ Can’t step on ashes,/ Only through leaves./ Our lips /Don’t drink from glasses,/ As we drink from springs.* (Coman 1986, 165).

In some variations, the deer children accuse their own father for not teaching them any other profession besides hunting, which is why

they ended up like animals. This kind of remark can be historically interpreted as a reference to a very ancient stage of the community before agriculture and crafts—a regression in which we can still easily slip again. The composer Bela Bartók collected the carol of *The Old Father* in Transylvania, from the villages of Idicel and Urusiu de Sus in 1914 and composed the *Cantata Profana* based on it. Thus, the popular legend perpetuates itself in cultured art, through music. The story of drinking from the tracks also appears in the fairytale *The Golden Stag*, where two siblings get lost in the woods and risk dying of hunger and thirst. The girl stops the boy from drinking from a fox's track, fearing he would turn into a fox and run away. Then she stops him from drinking from a bear's track, fearing he would turn into a bear and eat her. Finally, he succumbs to thirst and drinks rainwater collected in a deer's track, immediately transforming into a golden stag (Stăncescu, 1982). In some Romanian folktales, the hero turns into a stag for the same reason (Candrea 1932, 62). The circulation of these motifs is not limited to the Romanian space but as noted by Nicolae Constantinescu in Monica Brătulescu's notes, *two of the constitutive motifs of this type have international circulation, being recorded as such in the Motif-Index of Folk Literature under the acronyms D110 ff. 'Man transformed into wild beast' and D555.1 'Transformation by drinking from an animal's track* (1999, 20).

At the beginning of the 20th century, Tache Papahagi collected a variant in which a boy (son of a priest) cursed by his father to transform into a stag asks for forgiveness:

> *Hey brother, /Do not shoot me,/ For I am not who you think,/ For I am the son of a priest/, Cursed by my father/ To roam the woods/ For nine years and nine months./ By the end of which,/ I will go down to the village,/ I will enter the church,/ I will perform holy services,/ I will ring the golden bell* (Constantinescu 1999, 22).

We notice the duality of the rural world, formed by two poles – the forests versus the church – the centre of civilization and the path to

salvation, on one hand, and the obscure wilderness where humans should not linger too long on the other, where the cursed one is exiled and where echoes of ancient beliefs may survive, although not explicitly stated. We cannot help but wonder why there would be such aversion to the wilderness, why only religious services are the antidote for this animal transformation. If the forest were just the earthly expression of God's will, it should be a neutral if not beneficial space. But the forest hosts figures that bring fertility, worthy of admiration, and even idolatry. Is our boy's transformation thus a vague reminiscence of an ancient initiation, or is the fear of the good Christian of what lies beyond the village border a distant memory of some ancient rites of his time, which he should resist? Certainly, today it is impossible to recover the buried meaning of such texts, but we can at least approximate the context of their formation, especially by correlating them with other similar sources. However, what we can say with certainty is that the Christian elements in these cases are a much later addition, and originally, the meaning of this pre-Christian song may have been entirely different before assimilation, one where the transformation was not interpreted as a curse, but as a sacred initiation.

Although most depictions of the deer present it in a solar posture, as a fertilising presence for the fields, a kind of wild intermediary between heaven and earth, the deer also takes on a psychopomp aspect in our culture, a natural characteristic in a way, as it is the one that can guide you from one world to another. When it crosses waters, especially the sea, with a scarf hanging between its antlers, it is a sign of death approaching:

Rise, Nicholas, rise, / Rise and go outside, / Look down the valley, / Whom do you see coming? / It's a big stag coming./ What does

it have on its antlers?/ A cradle made of silk[12], */To take you out of the house* (Vulcănescu 1987, 172).

As we have seen, the deer as a vehicle of souls in the afterlife is not an isolated figure in Romanian culture. Similar songs, like the one where the dead girl crosses the sea between its antlers, can also be found among Ukrainians and Bulgarians. Incidentally, at least visually, the motif of swimming deer/reindeer is very ancient indeed and appears in the cave art of Lascaux and in a delicate mammoth ivory sculpture from Montastruc, dating back thirteen thousand years (Mc Gregor 2012, 17). Back to the animal in our song, it is asked to carry the girl smoothly, and prayers are said for the waters between the two realms not to be rough, so that she may reach the other world safely (Caraman 1983, 79). The stag is a soul farer for the steppe peoples in Asia, whereas earlier horses were killed and disguised as deer. It is possible that some mythological influences of such ethnic groups may have reached us along with various migration waves from the East.

Conclusions

Far from having exhausted the amazingly rich deer imagistic, we set out to briefly illustrate the diversity of zoo mythology, a realm full of expression, colour, significance, and above all, one that occasionally surprises with its coherence from one geographical area to another over great spans of time. Just as with other animals, the animal myths as we know them today are compositions that blend many foreign influences from local cultures over time. Romanian territory has been a place of encounters between the East and the West. Ancient Dacia had the same status, situated between the Asian populations of the steppes and the Germanic or Celtic ones from the West, resulting in a

[12] Contaminations between deer and aurochs' images are frequent. Herseni collects a carol where a girl is carried in a silk cradle between the horns of the aurochs (bohor) and not of a stag. (Herseni 1977, 17).

very rich folk landscape. The Romans contributed their share, bringing along the heritage of Hellenistic culture, which was highly syncretic at that time. Subsequent migrations of peoples added their own beliefs to the mix, just as the Slavs did.

After Christianization, we were far enough from both Rome and Constantinople for these archaic rites to survive for hundreds of years after they faded away in the West, up to the present day. From this point of view, the Carpathian region has proven to be particularly conservative as an ethnological reservoir. Secular carols known as winter solstice songs alongside the New Year processions with the deer's relatives, such as the *goat*, the *turca*, the *brezaia*, seem to indicate sort of a cult of their own here, possibly dedicated to a deer-like or bull-like deity, which later turned into masquerades, dances, and whose vague memory remained encoded in these folk customs. As it is the case with other mythological animals from our country, the stag is present in two great parallel currents that coexist culturally, but do not mix, namely the popular and the cult one. The *Physiologus* deer has nothing of the vitality of the masked one that hops around Romanians' yards around Christmas. These are two beings as different as they can be, although they are derived from one and the same wild creature. The two stag portraits remain separate and incompatible. The beast in the *Physiologus* does not come down to mix with the oral tradition of the deer in carols, be it psychopomp or bringer of plenty. It enters the rural world at most through religious art, but from there it is reassimilated in the local context. As seen in our discussion of Little Stag and *cervulum facere*, even the first bishops of Western Europe had to deal with these customs well alive back in the day. Fortunately for the mythological stag, mediaeval bestiaries came to its aid, making it a creature worthy of being taken as an example and a symbol of Christ. Unlike the mythological bear, the king of all animals who was dethroned and discredited in Europe by the lion, the stag’s image

enjoyed relative continuity in the two traditions, which might explain why remnants of pagan cults dedicated to it might have more easily survived. Here, it is worth quoting Mircea Eliade regarding folklore's role in preserving cultural forms of extraordinary antiquity, which he calls "living fossils" in geological terms:

> *The expression "living fossil" could be adopted and, above all, understood by all those who deal with folklore. Just as in caves an important archaic fauna is preserved, one that helps us understand primitive zoomorphic groups which are not fossilised, in the same way, popular memory preserves primitive mental forms that we cannot find preserved in history precisely because they could not be expressed in durable ways (documents, monuments, writing, etc.). In a word, because they were not fossilizable. Light, air, earth decomposed them, melted them* (Eliade 1992, 66).

Nicolae Constantinescu brings up in his studies the similar views of Ovidiu Papadima and Caracostea, which once again emphasise the ethno-conservative power of winter solstice songs and, by extension, of folk songs in general: *Usually, new forms fit into pre-existing patterns... In this way, we can distinguish in today's images the nucleus of primitive poetry.* (Constantinescu 1999, 20).

The deer is a prey animal *par excellence*, and its first reaction to seeing a human (or any other predator for that matter) is to flee. This makes it somewhat intangible, and what is intangible becomes filled with meaning for us. Certainly, other animals also enjoy mythical attributes, whether they are wolves, bears, or boars, but none, except perhaps birds, create this irretrievable distance between us and them, thus triggering an internal, psychological projection of the observer towards the observed. In this regard, the stag serves as a guide, the one who moves forward before us on unknown paths, leading toward uncertain worlds. Essentially, it remains a symbol of transition from

one state to another, a beneficial and solar guide. Whether it is the regeneration of nature as it renews its antlers or the return of the spring sun, showing us the way to new territories, enchanted lands, or the other realm as a creature carrying the soul, with golden antlers reaching the sky, sometimes white, sometimes with hooves made of bronze[13], having four or eight legs, it disperses evil and brings light wherever it appears. It remains among the most important creatures in all Romanian zoological mythology.

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[13] Motif B101.101. și B101.4.1. B101.4.1.cf. Thompson.

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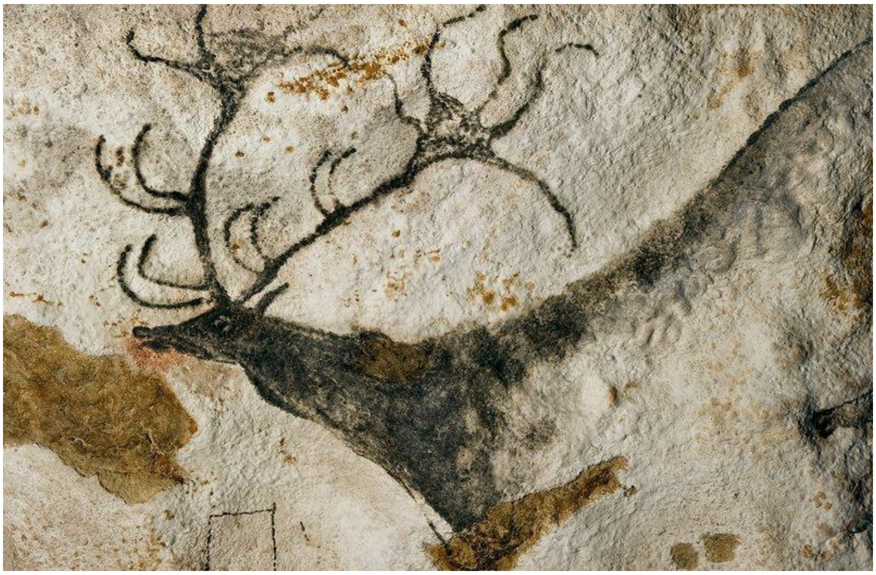


Fig. 1. Anonymous, cave painting of a giant stag from Lascaux, France, (personal archive).



Fig. 2. Anonymous, *The twelve labours of Hercules*, Roman mosaic from Lliria (Valencia), 3rd century, national Museum of Archaeology in Madrid, Spain, (personal archive).



Fig. 3. Nicolaes Witsen, *Duyvel-priester* - Siberian shaman costumed as a stag, 1705 https://www.researchgate.net/figure/Carving-published-by-Nicolaas-Witsen-in-1705-and-reputed-to-represent-a-Tungusic_fig2_341651826, (20.03.2023).



Fig. 4. Anonymous, Pazyryk culture, equestrian mask for burial shaped like a stag's head, leather, textiles, fur, gold, 170cm, Ermitaj, Sankt Petersburg, https://ro.pinterest.com/pin/323696910427419999/, (20.03.2023).



Fig. 5. Bernard Gui, the conversion of Saint Eustace, *Flores Chronicorum*, Bibliothèque Municipale, Besançon, France, MS 677, f. 35. https://portail.biblissima.fr/fr/ark:/43093/ifdatadc8e9f7ae4b369ad510ca1f387f479f08a8ced68, (20.03.2023).



Fig. 6. Dobromir the painter, Saint Eustace on the mural painting from Mănăstirea Argeșului, *ante* 1526, National Art Museum of Romania, Bucharest, (personal archive).



Fig.7. Jehan de Grise, marginalia showing *cervulum facere*, in the *Romance of Alexander*, Oxford: Bodleian Library MS. Bodl. 264. https://digital.bodleian.ox.ac.uk/objects/60834383-7146-41ab-bfe1-48ee97bc04be/surfaces/30258ea7-a5c9-40c8-b91c-e535cbee39f1/).



Fig.8. Andrius, *marginalia* showing *cervulum facere* în *Romans arthuriens,* Robert de Boron, pergament, Biblioteque Nationale de France https://gallica.bnf.fr/ark:/12148/btv1b6000108b/f529.item.r=Boron.zoom (Romans arthuriens, Robert de Boron, Bibliotheque Nationale de France, MF 11853, f. 261r), (20.03.2023).



Fig.9. Lambert le Tort, Alexandre de Bernai, *marginalia* in the *Romance of Alexander,* Oxford, Bodleian Library, MS Bodley 264 f. 21v. https://digital.bodleian.ox.ac.uk/objects/8d17bc13-14b6-4a56-b3b5-d2e1a935c60d/surfaces/4a393c08-c5aa-4272-8644-414c6bb455aa/, accessed 20.03.2023



Fig. 10, Anonymous, a stag drawing a snake out of its den, illustration for Guillaume le Clerc's *Bestiaire divin*. bnf-mss. Français 1444, https://mandragore.bnf.fr/ark:/12148/cgfbt102185x, (20.03.2023).



Fig. 12. Stag with entangled vegetation in its antlers, an image that may well have generated its supernatural link with the forest. ©Tracey Lund (https://500px.com/photo/89103021/stag-by-tracey-lund).



Fig. 13. Stag dance as seen in present-day Romania, Bucovina region. ©Gabriela Vochescu.

Cattle in the economy and material creation of Cucuteni communities

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Abstract

The article aims to highlight the economic and symbolic links established between the human communities from the Cucuteni-Trypillia civilization and cattle. A first dimension of the material considers the types of representations of this animal and the archaeozoological information and attempts to corroborate these two sets of data to obtain a more profound understanding of the importance of this species for the Cucutenian world, hopefully highlighting interaction patterns of human communities with cattle, both on an economic and mental level.

Keywords

Cucuteni-Trypillia; zoomorphic representations; archaeozoology; economy; symbolism; human-animal relations

Introduction

Our study represents an attempt to synthesise our previous specific case studies (Bodi, Solcan, and Bejenaru 2018; Solcan and Bodi 2021; Solcan and Bodi 2023), as part of an effort aimed at reconfiguring the way archaeologists approach the study of prehistoric populations' material culture, by imagining it not only as a product of purely cognitive processes, but also as a result of the organic reciprocal relationships established with the lived environment. In this specific case we focus our attention on the relationship between human

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communities and cattle during Chalcolithic in North-East Romania, which is characterised by the existence of the Cucuteni – Trypillia cultural complex. This archaeological phenomenon lived through four main phases of existence spanning more than a millennium, between 5,400/5,200 to 3,500 cal. BC, and at its peak it expanded on over 350,000 square kilometres, covering part of today's territories of Romania, Republic of Moldova, and Ukraine (Bem 2000-2001; Lazarovici 2010; Rassamakin 2012).

The studies that focused their attention on the role of cattle in the life of Chalcolithic communities from NE Romania are relatively few and discuss the issue from an either archaeological or archaeozoological perspective, depending on the authors' specialisation.

The archaeological approaches usually deal with cattle representations within the larger context of zoomorphic creations specific to the Cucuteni – Trypillia civilisation. In general, the content of signification attributed to zoomorphic representations is linked to the illustration of cosmogonic myths, and the image of cattle is usually assumed to be renditions of bulls. From this perspective, it is considered that the image of the bull embodies concepts such as power, strength, and virility subsumed to presumed solar (Balabina 1998; Burdo 2005; Lazarovici 2006; Rybakov 1965), lunar (Tkachuk 2014), or storm/thunder deities (Chirica and Văleanu 2008). In the rarer cases where an assumption is made that cattle representations are in effect depicting cows, the meaning content is shifted toward the fertility of feminine lunar deities (Balabina 1998; Burdo 2005). Most often, the archaeological interpretative discourse aimed at the identification of the possible signification of cattle images rests on the attempt of its integration within pre-defined systems of meaning based on historical and ethnographical data, considered to hold constant universal values, irrespective of the context of their creation. On the other hand,

zooarchaeologists usually focus on the economic importance of the identified taxa and try to reconstruct husbandry and hunting strategies specific to the studied communities, environmental conditions and their possible changes within the hinterland of the sites, and eventually identify specific social practices (Bejenaru, et al. 2018; Bejenaru and Stanc 2013; Cavaleriu and Bejenaru 2009).

We consider the archaeologists' mainstream attitude, combined with the independent approaches of archaeological and zooarchaeological records as a possible significant shortcoming and limitation of an interpretative, speculative, reading of the prehistoric material culture. We will thus try to ground our approach into a phenomenological foundation, where a new perspective can be built by focusing our attention on how direct experiences are perceived, embodied, and further expressed by human beings, within specific lived contexts. While this may seem as an unrealistic goal for prehistoric times, we will try to achieve it through the construction of an underlying theoretical structure that allows us to approach human existence as being defined by basic evolutionary behavioural constants reflected in the archaeological material, and as such accessible to the contemporary mind.

Theoretical Approach

A first step in this direction is offered by Heidegger's concept of *Dasein*, which defines human existence as a continuous state of threefold determination defined by the continuous interaction of the human being with things, other beings, and itself (Heidegger 2006). How this interaction unfolds, as well as the way the intelligibility of the environment is built, is governed by the concept of understanding (Heidegger 2006, 119, § 18 [86]). This understanding defines objects as entities that the human being perceives and makes use of, useful to the current situational preoccupation, and future projects. Since for us, as

prehistoric archaeologists, the sole source of information is provided by the material culture we retrieve, our focus is on the object side of this perspective. Our key takeaway is that artefacts no longer constitute objective concepts, their meaning being defined by a complex, situational, and variable context. Heidegger further develops this issue in his work related to *things* (Heidegger 1967), where, in its opening, he defines three categories: things as objects; things as names, including concepts and actions; and things as the totality of connections between objects, concepts, actions, and anything else that possesses an existence (Heidegger 1967, 6). This last concept is considered to be the primary manner through which the human being experiences objects, as it is rooted in our lived interaction with the environment (Heidegger 1967, 75), while the first two are only possible through external observation and intellectual abstract conceptualization. The first two types of things are, evidently, accessible through categorial scientific knowledge. The third type, through its intrinsic connection to a specific situational context, inextricably linked to the process of living, becomes accessible only through phenomenological interrogation. Things become accessible to this type of thought since they become entities that can be met and understood only within human lived experiences as actions in concrete situations. Only through our perception of, and action on things we can understand ourselves as human beings, just as things, through their accessibility towards us, become charged with meaning (Gendlin 1967, 259). From this perspective, things become an expression of an equation that, through its reversal, offers access to lived experience, enabling us to construct an interpretation of the archaeological material from a phenomenological perspective. Working along these lines means however that we must be aware from the onset that our own actions cannot be situated outside our being in the world, which

means that it will ultimately also constitute an explanation of our situation.

Therefore, in order to make the cattle representations accessible to a phenomenological examination, we will situate them in the domain of explicitness, as a conceptualized form of understanding (Heidegger 2006, 207, §32 [151]). Explicitness in this sense differs from explanation as it constitutes a continuation of interpretation and meaning construction begun in understanding. Explicitness, the way we understand it, constitutes the transmissible form of the perception of the human being of a current context. Thus, material representations transform themselves into non-verbal acts of communication charged by a meaning resulted from lived experiences. While the absence of a worded explanation makes impossible the reduction of the totality of a thing's possible functional roles (Heidegger 2006, 216, §33 [158]), it does not mean that we open our investigations towards absolute relativism, but that we rather close it within its own current signification. By explicating the cattle representations through our own discourse, we will be both advancing a possible archaeological interpretation, as well as a reflection of our own current context.

To achieve this, we will follow the methodological principles specific to a phenomenological investigation. The first step will consist in suspending our existing knowledge of the subject matter (Creswell 2007; Husserl 1983, 60-62, §32). By becoming aware and trying to avoid our preconceived ideas, allows us to reduce it to its essential attributes (Langsdorf and Reeder 1988, 102). However, in the second step, our reduction will not aim for the definition of the phenomenon at the level of pure consciousness (Husserl 1983, 63-66, §33), but, returning to our theoretical foundation, we will try to define the possible lived experiences situated at an affective, pre-conceptual level. To reach our objective, we will look at the cattle representations as visual entities, and we will try to understand them as affective expressions resulting

from pre-determined biological structures stemming from the evolutive history of the human being. These pre-rational, universal affective constructs constitute factors that affect, at least partially, our behaviour, and guide us in dealing with quotidian situations (Ekman 1992; 1994; LeDoux 2014; Panksepp 2005; Sander 2013).

This transition, from Heidegger's ontological phenomenology to an ontic level, is permitted by our understanding of the structure of the human consciousness as being the result of cumulative and inter-relational biological processes (Damasio 1999). The perception of self finds its substantiation in neural structures that continuously monitor the state of the organism's physical state, in all its dimensions. This proto-consciousness constitutes a homeostatic mechanism, without perception or knowledge, which plays the role of a continuously updated reference point in the process of consciousness construction (Damasio 1999, 154). The second dimension of self consists in the construction of the primary consciousness through the interaction between the organism and the environment, through which an object/entity that affects the organism's current state is perceived and represented non-verbally. This primary representation of the external object, as well as of the inner state modification, results in the creation of a new mental, non-verbal image that explains the casualty relationship between the object and the change of state. This new image manifests itself at the level of primary consciousness as an affective state (Damasio 1999, 169-170). Irrespective of whether we attribute the occurrence of emotions to the interaction between the brainstem, hypothalamus, and somatosensory cortex (Damasio 1999, 193), or between the somatic musculoskeletal system and the deep brain areas in the medial subcortical regions (Panksepp 2008, 61), for our purposes it is clear that basic affects have their roots within our very biology. What is focal for our theoretical foundation is that the affective situation and the understanding are created at the level of primary

consciousness. We can therefore attempt the reconstruction of affective states because their production mechanisms remain constant (Damasio 1999, 174), even though they are in continuous change at the level of lived experiences. The last dimension of self consists in its capacity to create an autobiography starting from the memorisation of its existential moments, which constitute themselves into invariant mental representations resulting from the blending of biological predetermination and cultural environment. The interaction between the fixed autobiographic self, the proto-consciousness, and emotions models our behaviour, orients our actions (Damasio 1999, 173-174), and defines the extended consciousness as accumulated knowledge and capacity of generation of an individual perspective (Damasio 1999, 198). From the perspective of our theoretical approach, the extended consciousness, through its rationalisation component, constitutes the ontic expression of the explanation concept. Through their double determination by both visceral and cultural dimensions, the possible explanations of the archaeological material are dependent upon the impossible reconstruction of their cultural context. We will thus attempt to reconstruct the meaning of cattle representations by situating them at the level of non-verbal explication within the context drawn by the archaeozoological material, which, for this specific case, we will consider as the external factor affecting the homeostasis of the human organisms.

The archaeological material

We have selected the artefacts of interest for our study from the existent body of literature, and as such, for most cases, we will rely on the descriptions and determinations made by the authors presenting the results of their excavations. Unfortunately, the illustrations accompanying the texts, in many instances, do not allow the clear identification of the represented species. Starting from the already

existing typologies (Nițu 1972, 9-96; 1975, 15-119; Balabina 1998; 2001, 15-44; Bodi 2004, 155-162; 2010, 201-203; Lazarovici, Lazarovici 2015, 47-48), we consider best to organise the existent materials according to the manner of representation:

I. Ronde-bosse representations

I.1. Zoomorphic pots

I.1.a. Pots that represent the whole animal

I.1.b. Pots with an open hemispherical container

I.1.c. Rhyton-type pots (representing only the animal's horns)

I.2. Clay "sceptres"

I.3. Statuettes

II. Representations in alto-relievo

III. Representations in bas-relief

IV. Painted representations

V. Stylized representations

I.1. Zoomorphic pots

I.1.a Pots that represent the whole animal (Plate 1 / 1-2). The number of pots representing the entire animal in a sufficiently good conservation state that may allow the identification of the species is relatively low when compared to other categories of artefacts. In general, the pots preserved are of small dimensions, similar to those of zoomorphic statuettes, presenting a concavity of various sizes on their back. For phase A, zoomorphic pots that may be interpreted as cattle representations have been identified in the sites from Ariușd and Poduri (Sztáncsuj 2015; Monah, et al. 1983). For phase A-B there is a known discovery at the east of the Prut River from the site of Sinești I (Balabina 1998, 180-181, pl. 92/1; Bodean 2020, 339). From phase B there are multiple such artefacts preserved, originating from the sites of Poduri (Garvăn 2009, 153-154, fig. I/1, II), Bilcze Złote (Țurcanu 2013,

72-73), and Kosziłowce (Balabina 1998, 181, fig. 90/5, 91, 92/3). This class of artefacts has analogies in other cultural spaces too, with similar discoveries being made within the Gumelnița – Karanovo VI cultural complex, and within the Anatolian space (Nițu 1972; Sztáncsuj 2015).

Another variant of zoomorphic pots is constituted by more elaborate creations, with larger recipients, more carefully crafted. Examples from this category have been unearthed from the sites of Traian (Bem 2007, 188-189, fig. 424/2), Ghelăiești (Nițu 1972-1973, 16-17, fig. 2; Cucoș 1975, 12-13, fig. 4; 1999, 133, 287, fig. 73/1), Văratic-*Căsoaia cu Apă* (Marchevici 1996, 254, 256, fig. 1/3), or Kosziłowce (Burdo 2002, 86, 146, fig. 8/2-3). Until now, this class of zoomorphic pots is specific to only the A-B and B phases of the Cucuteni culture.

The second subtype (I.1.b.) (Plate 1 / 3-4) is represented by artefacts with a hemispherical recipient standing on four legs and presenting cattle protomas. They are characteristic of the last evolution phases of the Cucuteni culture. For the A-B phase such objects are known east of Prut River (Husyev 2021, 39, 41, fig. 3/4). For phase Cucuteni B, zoomorphic pots with hemispherical containers have been found in the sites of Cucuteni (Schmidt 1932, pl. 11/3; Petrescu-Dîmbovița, Văleanu 2004, fig. 223/13; Ţurcanu, Bejenaru 2015, 212-213) and Văleni (Cucoș 1974-1976, 51, fig. 25/2; 1999, 134, 287, fig. 73/2). This type of discoveries is more frequent east of the Prut River with finds in the sites of Trifăuți (Marchevici 1981, 142, fig. 97/8), Krinichki (Starkova 2013, 10-11, fig. iII.7/1), Šuškova (Videiko 2004, 505), Andreevka (Balabina 2001, 28-29, fig. 6/1), the Khmel'nitska region (Stratulat et al. 2008, 190, U130, U131), and in the site of Șipeniț (Childe 1923, fig. XVI/1; Cucoș 1999, 134).

I.1.c. The *rython* type pots (Plate 1 / 5-6), representing a cattle horn, are currently specific only to Cucuteni phase A within the space west of Prut River and east of the Carpathian Mountains, and have

been discovered in the sites of Izvoare (Marinescu-Bîlcu 1990), Trușești (Petrescu-Dîmbovița, Florescu and Florescu 1999), Scânteia (Chirica, Mantu and Țurcanu 1999), Dumești (Maxim-Alaiba 1983-1984), and Poduri (Monah, Dumitroaia, et al. 2003).

I. 2. The clay "sceptres" (Plate 2 / 1-3) consist of artefacts that represent the neck and head of a bovid and have at their interior a small cavity. This type of object has been interpreted either as a *rhyton* (Nițu 1972) or "sceptre" (Marinescu-Bîlcu 1990; Marinescu-Bîlcu and Bolomey, 2000), and it has been discovered in the sites of Trușești (Petrescu-Dîmbovița, Florescu and Florescu 1999), Drăgușeni (Marinescu-Bîlcu and Bolomey 2000), Costești (Furnică 2015; Enea, Boghian and Ignătescu 2016), Ruginoasa (Lazarovici and Lazarovici 2012), Mănăstioara (Lazarovici and Lazarovici 2016), and possibly Ariușd (Sztáncsuj 2015). All the discovery contexts belong to the first phase of Cucuteni culture and are situated west of the Prut River. Based on details present on some of the artefacts, an argument may be made that at least some objects of this type are representations of *Bos primigenius* (Petrescu-Dîmbovița, Florescu and Florescu 1999).

I.3. Statuettes (Plate 2 / 4-6). The number of zoomorphic statuettes discovered in the sites of the Cucuteni - Trypillia civilisation is relatively high when compared to the other classes of artefacts discussed within this paper, but their schematic manner of realisation and their usual fragmented state make the identification of the represented species difficult.

For the Cucuteni phase A chronological interval, an overview of the finds may indicate a preponderance of sheep/goat representations over cattle representations in the sites of Scânteia (Mantu 1994), Ruginoasa (Lazarovici and Lazarovici 2012; Lazarovici and Lazarovici

2012a), Cucuteni-*La Dobrin* (Lazarovici 2015), Ariușd (Sztáncsuj 2015), Poienești (Lazarovici and Babeș 2015), Fulgeriș (Istina 2016; 2015), and Giurgești (Furnică 2015; Enea, Boghian and Ignătescu 2016). However, in the sites of Preutești (Ursulescu and Ignătescu 2003), Târpești (Marinescu-Bîlcu 1981), Frumușica (Matasă 1946), and Dobrovăț (Lazarovici et al. 2019) the majority of zoomorphic statuettes are reported as representing cattle. At the same time, for the sites of Drăgușeni (Marinescu-Bîlcu and Bolomey 2000), Pocreaca (Iconomu 2012), Hoisești (Bodi 2010), or Șoimeni (Buzea 2013), the determination at the level of represented species has been impossible.

For the second part of the Cucuteni Culture, the A-B and B phases, zoomorphic representations have been uncovered in the majority of the investigated sites, but determination at the level of species has been impossible, and in many instances a separation between the artefacts belonging to the two chronological intervals has also proved difficult (Petrescu-Dîmbovița, Florescu and Florescu 1999; Petrescu-Dîmbovița and Văleanu 2004; Furnică 2014; Enea, Boghian and Ignătescu 2016). Other authors have preferred to group together from the start the representations of sheep/goat and cattle as differentiation between species proved difficult (Balabina 1998; Burdo 2002; Husyev 2021).

II. The representations in alto-relievo (Plate 3 / 1-4) are constituted by the protomas present on the Cucuteni type pottery, and three typological sub-types have been identified (Bodi 2010; Bodi 2004). This category may presents functional dimension as pot handles, but researchers agree that their symbolic and decorative valences take precedence. This type of pot decoration is more frequent during the first phase of existence of the Cucuteni culture (Cucoș 1999; Nițu 1972) and it is dominated by cattle representations. Protomas are present in

most investigated Cucuteni A sites, being signalled in the sites of Poienești, Scânteia, Ruginoasa, Cucuteni, Drăgușeni, Preutești, Trușești, Hăbășești, Hoisești, or Dobrovăț.

For the A-B phase protomas are present in the site of Traian (Bem 2007), and for the Cucuteni B phase they are mentioned in the sites of Târgu Neamț (Preoteasa, et al. 2007), Gura Văii (Nițu, Buzudugan and Constantin 1971), Poduri (Monah, Dumitroaia, et al. 2003), Ghelăiești, and Târgu Ocna (Cucoș 1999).

III. Representations in bas-relief (Plate 3 / 5-8). Unlike the previous category, this category's exclusive decorative dimension is unquestionable. Although less frequent than alto-relievo representations, bas-relief renditions of horned animals are present on pots from the Cucuteni A phase from the sites of Scânteia and Poenești, although it is unclear whether these depict cattle or ovine.

For the Cucuteni A-B and B phases, bas-relief representations of cattle have been unearthed from the sites of Ghelăiești, Mărgineni, Văleni, Târgu Ocna (Cucoș 1999), Cucuteni-*Cetățuie* (Petrescu-Dîmbovița and Văleanu 2004), and Valea Lupului (Nițu 1972). East of the Prut River such representations are found decorating not only pots, but also clay models of houses / sanctuaries (Stratulat, et al. 2008). A specific trait, up until now, of the Cucuteni phase B bas-reliefs is their frequent association with the so-called type C pottery (Alaiba 2004; 2005; Nițu 1976). Such cases have been identified in the sites of Poduri (Monah, Popovici, et al. 1983-1985; Monah, Dumitroaia, et al. 2003; Dumitroaia, et al. 2009), Mihoveni (Batariuc, Haimovici and Niculică 2000-2001; Cucoș 1977-1979), Cucuteni-*Cetățuie* (Alaiba 2004), Frumușica, and Târgu Ocna (Cucoș 1977-1979).

IV. The painted representations of cattle (Plate 4) are specific to the last phase of existence of the Cucuteni-Trypillia cultural complex and have already been the subject of an in-depth analysis in our previous work (Bodi, Solcan and Bejenaru 2018). This type of rendition is present throught the entire space of the Cucuteni phase B in the sites of Poduri (Dumitroaia, et al. 2009), Valea Lupului and Iași-*Hotel Moldova* (Nițu 1972a), Petreni (Nițu 1976; Marchevici 1981), Vărvăreuca XV (Marchevici 1981; Burdo 2013), Șuri I (Bikbaev 1989), Bădragii Vechi (Marchevici 1981), Costești IV (Marchevici 1981), Bernashevka 2 (Tkachuk 2014), Bilcze Złote – Werteba I (Tkachuk 2013), and from various regions across Ukraine's territory (Stratulat, et al. 2008; Videiko 2004; Hodenko-Nakonechna 2017).

V. The stylized representations (Plate 5) encompass schematic images that are usually associated with cattle symbolism.

A first category includes horns (Plate 5 / 1-4) present on various classes of artefacts, such as pots or miniature chairs / thrones, and present for instance in the phase A sites of Tîrpești, Hăbășești, Ruginoasa, and others (Marinescu-Bîlcu 1981; Chirica and Văleanu 2008). During phase B, "horns" are also present on models of houses / sanctuaries (Cucoș 1993; Husyev 2021).

Another type of stylized representation is constituted by clay bucrania (Plate 5 / 5-6), discovered in the sites of Cucuteni A phase at Frumușica, of Cucuteni A-B phase at Vorniceni, and of Cucuteni B phase at Poduri (Preoteasa 2012; Lazarovici and Lazarovici 2015).

For Cucuteni phase B, a distinct class of stylized representations is found within the painted motifs of the pots (Plate 5 / 7-8). Stylized bucrania have been described for the pottery decoration from Poduri (Monah, Dumitroaia, et al. 2003; Dumitroaia, et al. 2009), Târgu Ocna (Matasă 1964), and Sărata Monteoru (Dumitrescu 1979). Closely related

to these are the “V”, “W”, or “M” symbols from the pottery decoration of the Vărvăreuca XV, Bădragii Vechi, and Brânzeni group sites, interpreted as cattle (bull) stylized images (Marchevici 1981).

The archaeozoological material

For our analysis, we selected only the sites that present both cattle representations and published archaeozoological analyses. We have focused our attention only on the most frequently identified species, that also hold significant economic value in terms of theorized subsistence strategies, these being cattle (both wild – *Bos primigenius* – and domestic – *Bos taurus*), sheep / goat (*Ovis aries* / *Capra hircus*), domesticated pig (*Sus scrofa domesticus*), red deer (*Cervus elaphus*), roe deer (*Capreolus capreolus*), and wild boar (*Sus scrofa ferus*). Given that not all archaeozoological studies report the estimated minimum number of individuals (MNI), we have used the number of identified specimens (NISP) to construct our frequency analyses (Table 1).

We have conducted the statistical analysis of the archaeozoological material in R (R Core Team 2024), using RStudio as a user interface (Posit Team 2024). In addition to R base, for the data analysis and visualisation we utilised the following packages: readxl (Wickham and Bryan 2023), tidyverse (Wickham, et al. 2019), tidytext (Silge and Robinson 2016), FactoMineR (Lê, Josse and Husson 2008), janitor (Firke 2023), tidyr (Wickham, Vaughan and Girlich 2024), ggplot2 (Wickham 2016), ggpattern (Mike, Trevor and {ggplot2 authors} 2022), and patchwork (Pedersen 2024).

Table 1. Frequency of selected species remains in the studied sites.

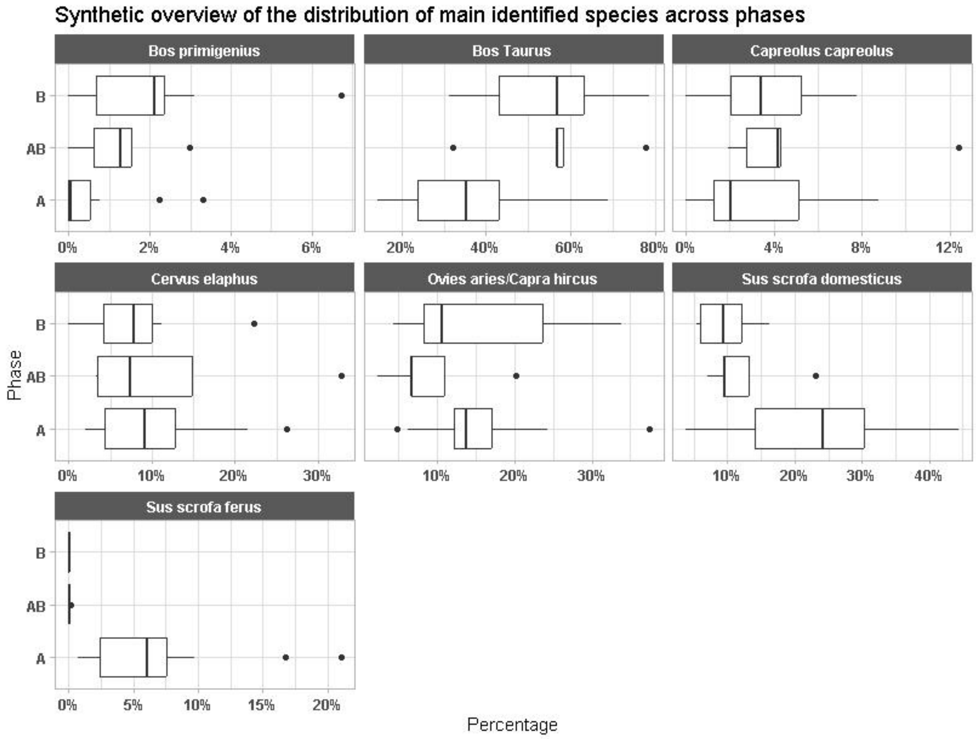
Phase	Site	*Bos Taurus*	*Ovies aries/ Capra hiscus*	*Sus scrofa domesticus*	*Bos primigenius*	*Cervus elaphus*	*Capreolus capreolus*	*Sus scrofa ferus*
A	Cucuteni	58.59%	12.74%	3.82%	0.01%	13.38%	0.64%	7.01%
	Haimovici 1969; 2004; 2009; Cavaleriu and Bejenaru 2009; Bejenaru and Stanc 2013.							
A	Târpești	68,7%	4,91%	14,66%	0,73%	5,78%	2,25%	0,73%
	Necrasov and Știrbu 1981; Cavaleriu and Bejenaru 2009; Bejenaru and Stanc 2013.							
A	Poduri	58,13%	15,92%	10,4%	1,32%	5,21%	1,63%	4,08%
	Cavaleriu and Bejenaru 2009; Bejenaru and Stanc 2013; Bejenaru and Bodi 2014.							
A	Trușești	17,51%	12,44%	13,45%	3,30%	26,14%	6,85%	16,75%
	Haimovici 1999; 2009 ; Cavaleriu and Bejenaru 2009.							
A	Fulgeriș	24.07%	18.51%	21.17%	0.78%	21.47%	4.47%	5.86%
	Haimovici and Vornicu 2005; Bejenaru and Istina 2018; Bejenaru and Stanc 2013.							
A	Drăgușeni	35,21%	6,30%	8,51%	0,38%	12,89%	1,48%	6,06%
	Bolomey and El Susi 2000; Cavaleriu and Bejenaru 2009; Bejenaru and Stanc 2013.							
A	Scânteia	42.99%	17.88%	31.71%	0.0057%	3.13%	0.52%	1.89%
	Mantu, Știrbu, and Buzgar 1995; Știrbu 2004; Bejenaru and Stanc 2013; Bodi, et al. 2013.							
A	Dumești	39,5%	15,97%	31,93%	0,84%	3,36%	1,68%	2,52%
	Haimovici 1989; Cavaleriu and Bejenaru 2009; Bejenaru and Stanc 2013.							
A	Bălțați	42,42%	13,13%	24,24%	-	9,09%	2,02%	8,08%
	Haimovici 1997; Cavaleriu and Bejenaru 2009; Bejenaru and Stanc 2013.							
A	Preutești	29,07%	16,28%	25,58%	-	12,8%	5,81%	2,33%
	Haimovici 2003; Cavaleriu and Bejenaru 2009; Bejenaru and Stanc 2013.							
A	Hoișești	14,26%	14,26%	28,96%	0,51%	10,15%	7,58%	21,07%

Phase	**Site**	***Bos Taurus***	***Ovies aries/ Capra hiscus***	***Sus scrofa domesticus***	***Bos primigenius***	***Cervus elaphus***	***Capreolus capreolus***	***Sus scrofa ferus***
	Cavaleriu, Bejenaru, and Bodi 2006 ; Cavaleriu and Bejenaru 2009; Bejenaru and Stanc 2013.							
A	Ruginoasa	31,68%	12,06%	37,84%	0,54%	7,61%	1,03%	6,21%
	Știrbu 2006; 2012.							
A	Fetești	23,3%	24,27%	25,24%	-	1,94%	8,74%	9,7%
	Cavaleriu and Bejenaru 2007; 2009; Bejenaru and Stanc 2013.							
A	Dobrovăț	42,90%	7,80%	44,40%	0,00%	2,80%	0,00%	1,50%
	Oprean 2020.							
A-B	Costești	20,98%	37,5%	15,62%	2,23%	11,16%	2,67%	6,69%
	Boghian et al. 2014.							
A-B	Cucuteni	77,69%	2,33%	6,98%	-	7,44%	-	4,18%
	Haimovici 1969; 2009; Bejenaru and Stanc 2013.							
A-B	Onișcani	58,11%	6,71%	9,49%	2,98%	14,89%	1,12%	4,28%
	Haimovici 2009.							
A-B	Crețești	56.75%	20.24%	13.19%	0.62%	3.37%	2.77%	0.03%
	Haimovici 2007; Haimovici and Vornicu 2009; Bejenaru and Stanc 2013.							
A-B	Vorniceni	56,65%	10,94%	23,17%	1,28%	3,43%	1,39%	1,93%
	Haimovici 2009.							
A-B	Traian	32.11%	6.68%	9.37%	1.54%	32.76%	12.41%	0.12%
	Haimovici 2009; Bem 2007; Bejenaru and Stanc 2013.							
B	Liveni	63,51%	9,18%	6,98%	6,72%	4,52%	1,68%	2,71%
	Haimovici and Ungurianu 2002.; Bejenaru and Stanc 2013.							

Phase	Site	*Bos Taurus*	*Ovies aries/ Capra hiscus*	*Sus scrofa domesticus*	*Bos primigenius*	*Cervus elaphus*	*Capreolus capreolus*	*Sus scrofa ferus*
B	Mitoc	60,2%	4,4%	5,42%	0,52%	22,22%	1,03%	4,91%
	Haimovici 1986; Bejenaru and Stanc 2013.							
B	Ghelăiești	73,47%	6,45%	5,6%	2,43%	9,2%	0,42%	1,37%
	Haimovici and Stan 1977-1979; Bejenaru and Stanc 2013.							
B	Târgu Neamț	78,72%	10,63%	6,38%	-	-	-	-
	Oleniuc, Bejenaru, and Preoteasa 2012.							
B	Mihoveni	62.65%	9.34%	10.12%	3.11%	7.78%	1.17%	0.01%
	Haimovici 1999-2001; 2004.							
B	Valea Lupului	56,76%	7,32%	5,4%	2,13%	18,57%	2,31%	5,6%
	Haimovici 2009; Bejenaru and Stanc 2013.							
B	Cucuteni	48.91%	13.4%	9.35%	0.93%	11.21%	7.79%	0.08%
	Haimovici 1969; 2009; Bejenaru and Stanc 2013.							
B	Costești	47,14%	19,28%	10,71%	2,14%	10,71%	0,71%	3,57%
	Boghian et al. 2014.							
B	Fetești	29,3%	24,1%	27,1%	-	4,8%	4,4%	6,3%
	Cavaleriu and Bejenaru 2007; Bejenaru and Stanc 2013.							
B	Sărăta Monteoru	31,25%	28,07%	16,25%	2,27%	6,82%	0,68%	6,14%
	Bejenaru, Stanc, and Cavaleriu 2011;							
B	Poduri	38,64%	33,77%	15,64%	0,84%	4%	0,99%	3,39%
	Bejenaru and Stanc 2013.							

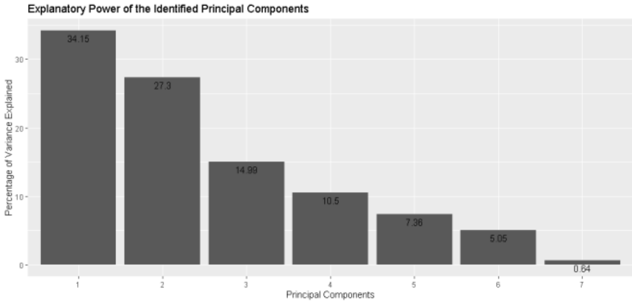
Due to the structure of the dataset, we have found our analytical options to be limited, but the initial exploratory data analysis (Graphic 1) has highlighted some interesting trends in the data. Both wild and domesticated cattle seem to play a constantly increasing role throughout the entire period of existence of the Cucuteni culture, while both the domesticated pig and wild boar seem to fall out of favour.

Graphic 1. General trends in the exploitation of the most important animal species.



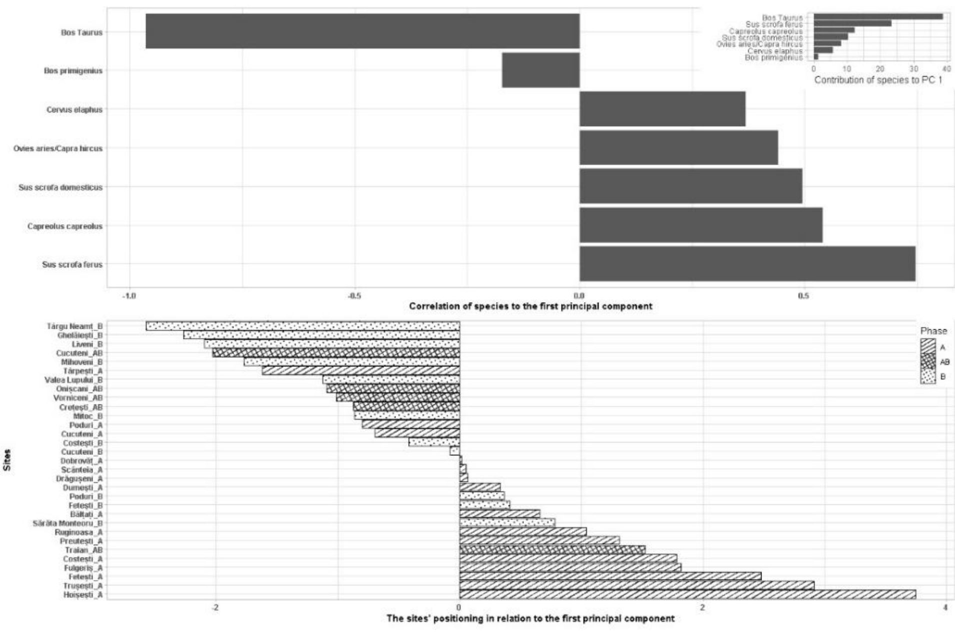
For a more detailed understanding of the frequency variation of the archaeozoological data, we have decided to follow up with a principal component analysis. From Graphic 2 we observe that the first three principal components extracted explain 76.44% of the variance and will further constitute the focus of our attention.

Graphic 2. Variance explained by the principal components.



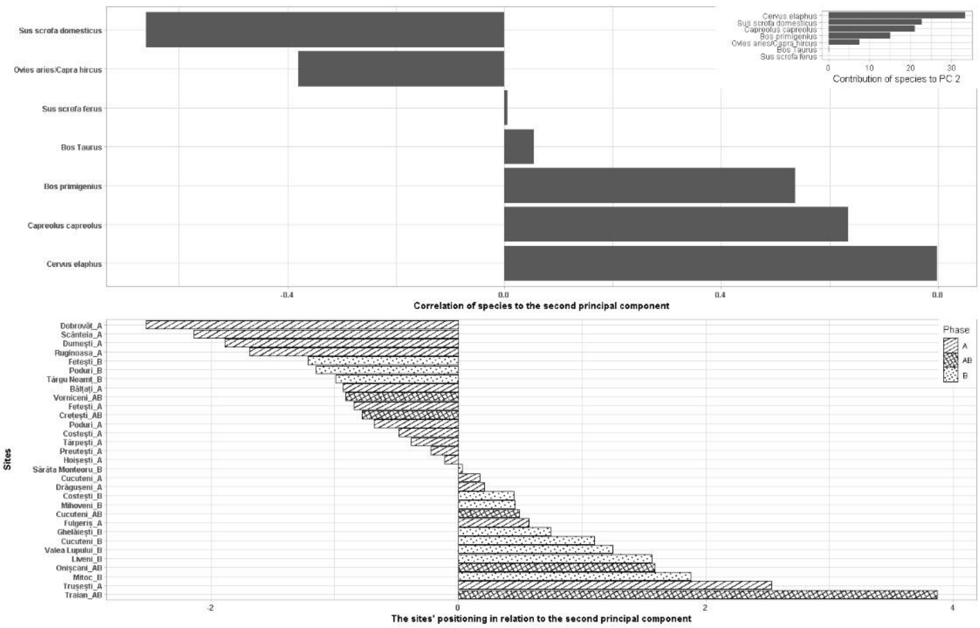
The first principal component (Graphic 3) explains a little over one-third of the data variation and is mainly defined by the percentages of cattle and wild boar remains, and to a smaller degree by roe deer, and domesticated pig. A first thing to notice is that the percentages of cattle remains find themselves in a relationship of negative correlation with the other species important in the definition of PC 1. A look at the relationship of the analysed sites with PC 1 reveals that most Cucuteni A-B and B sites are characterised by an increase in the number of cattle remains and a decrease in the number of wild boar, roe deer, and domesticated pig remains, while the opposite is true for the Cucuteni A sites.

Graphic 3. Variables and sites defining Principal Component 1.



The second principal component (Graphic 4) explains close to one-third of the data variation and is mainly defined by the percentages of red deer and domesticated pig remains, with smaller contributions from roe deer, and aurochs. The percentages of red deer remains find themselves in a relationship of negative correlation with those of domesticated pig, and present a positive correlation with those of roe deer and aurochs. Increased percentages of red deer, roe deer and aurochs are a characteristic of most Cucuteni A-B and B sites, while increased percentages of domesticated pig are specific for the Cucuteni A sites.

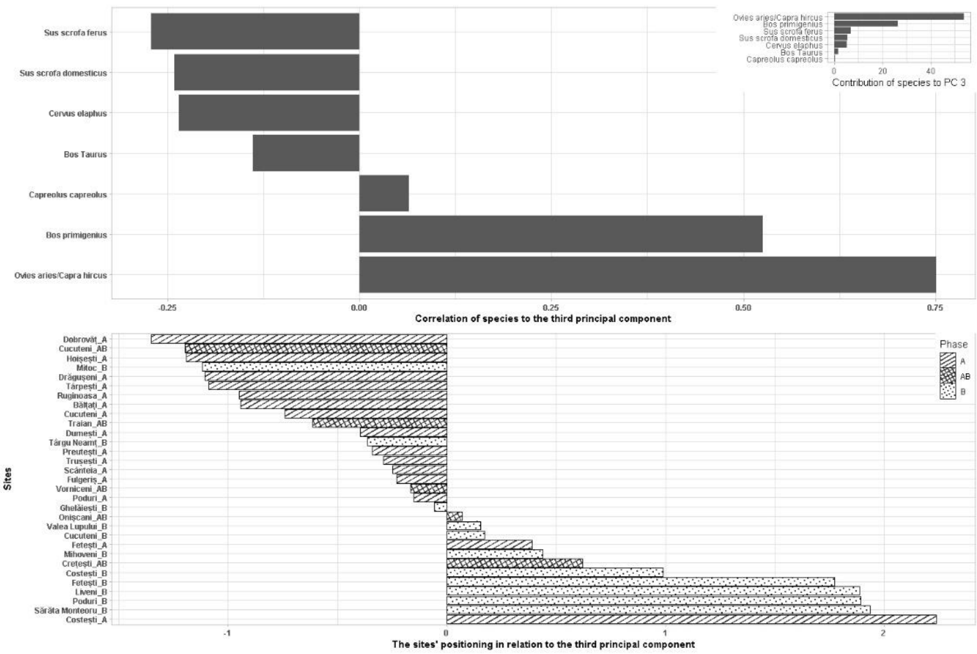
Graphic 4. Variables and sites defining Principal Component 2.



The third principal component (Graphic 5) explains 15% of the variation and is mainly defined by the percentages of sheep / goat remains, with a smaller contribution from aurochs. It is worth noting that for sheep / goat there are no strong correlations with other species, which suggests that PC 3 rather illustrates the specific variation of

sheep / goat remains, this species being rather independent of the rest of the other variables, except for a significant positive correlation with the aurochs' percentages. For both species, there is a clear trend of higher percentages within the archaeozoological material throughout phase B of the Cucuteni culture.

Graphic 5. Variables and sites defining Principal Component 3.



Discussion and Conclusions

At a general level we observe that how cattle are represented within the human material culture tends to vary throughout the existence of the Cucuteni culture. While the statuettes, protomas, zoomorphic pots, and stylized representations constitute a constant across the entire temporal space, the sceptres and *rhytons* are specific only to the earliest phase, while the painted representations are specific for the end of the temporal frame. These shifts in the typology of the artifacts are accompanied by shifts in the economy of the Cucutenian

communities. The relative importance of cattle, both domesticated and wild, seems to follow an ascending trend as time passes, and their rise is accompanied by a decrease in other domesticated and wild species' percentages. While we are aware that a basic tenet of statistics stipulates that correlation does not imply causation, in this specific case we believe that the shifts observed in the material culture of Cucutenian communities are linked to the trends observed in the archaeozoological data and that they reflect a change in the mental models governing the relationship of humans and their livestock. Our belief is supported by our theoretical foundation, which considers any human action as an adaptation to the ever-changing environmental conditions and our automatic and constant adjustment to maintain biological and mental stability.

However, before further in-depth speculation aimed at defining the specifics of these changes may be possible, a few other aspects need to be expanded upon. A first issue that will need to be addressed is the reliability of our archaeozoological material analysis, as it runs counter to what is currently the mainstream of thought. At this moment, many archaeologists, ourselves included, dealing with the reconstruction of subsistence strategies and husbandry practices of Cucutenian communities work off the premise that changing environmental conditions, characterised by a warmer and drier period at the end of the Chalcolithic and the beginning of the Bronze Age led to a decrease in the intensity of cattle raising. However, this frame of thought is built upon generalisations from specific cases (Bejenaru, et al. 2018 being the most recent), and since our analysis also rests on a relatively small sample, it needs to be verified through the expansions of the dataset through the inclusion of the rest of Cucutenian sites with published archaeozoological reports.

A second aspect that needs further investigation is constituted by the paradox outlined by the second principal component (Graphic 4).

While the first principal component (Graphic 3) shows that the increase in domesticated cattle percentages has eroded the percentages of all other species, but most of all those of the wild boar, PC2 suggests that the resources offered by the domesticated pig are being partially replaced by an intensification of hunting activities aimed especially at red deer (a forest species), and to a lesser degree at roe deer and aurochs (skirt species). Since these three species do not allow us to assume that hunting preferences changed due to the modification of the general environmental conditions, we must assume that these most likely represent a change in mental models, that may also be the underlying cause of the negative correlation relationship observed between domesticated cattle and wild boar in PC1. As such, to grasp the meaning of the cattle in the life of Cucutenian communities we will have to expand our research interests to other apparently connected, although less represented, species and explore their possible meaning and impact on the creation of interconnected systems of significance.

As a final thought, while our study has not provided us with the answers we were hoping for, it has exposed an intricate web of interdependencies and complex challenges and leaves us curious and excited for the future of our research into the Chalcolithic human-animal relationships as it appears that dealing with only animal species that have been "dignified" with artistic representation is an incomplete approach at best.

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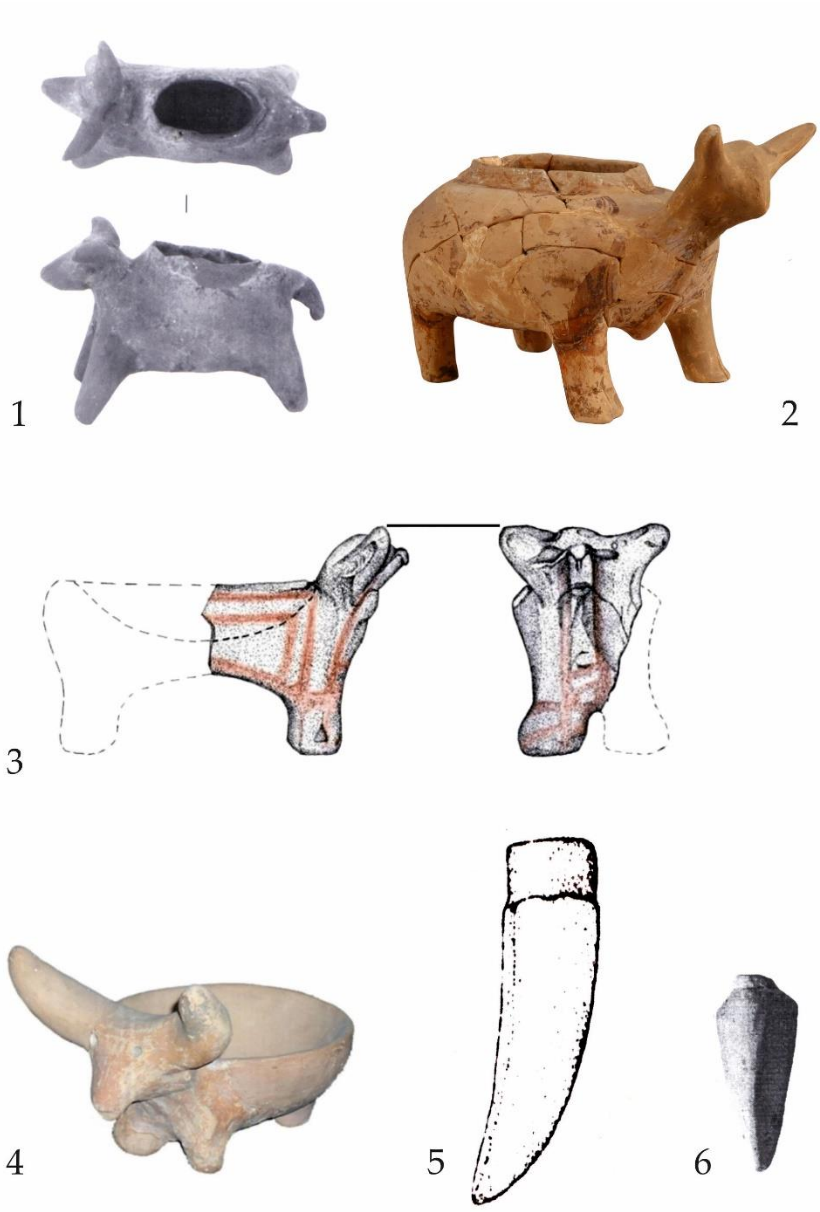


Plate 1. Zoomorphic vessels and Rhyton type vessels: 1. Ariușd (Covasna county, Romania); 2. Văratic (Republic of Moldova); 3. Cucuteni (Iași county, Romania); 4. Šuškova (Ukraine); 5. Trușești (Botoșani county, Romania); 6. Scânteia (Iași county, Romania) (different scales) (1. after Sztáncsuj 2015, pl. CCXXXV/7; 2. after Stratulat et al. 2009, cat. no. 122; 3. after Țurcanu and Bejenaru 2015, fig. 11/1; 4. after Videiko 2004, 505; 5. after Petrescu-Dîmbovița, Florescu and Florescu 1999, fig. 384/1; 6. after Chirica, Mantu and Țurcanu 1999, cat. no. 249).

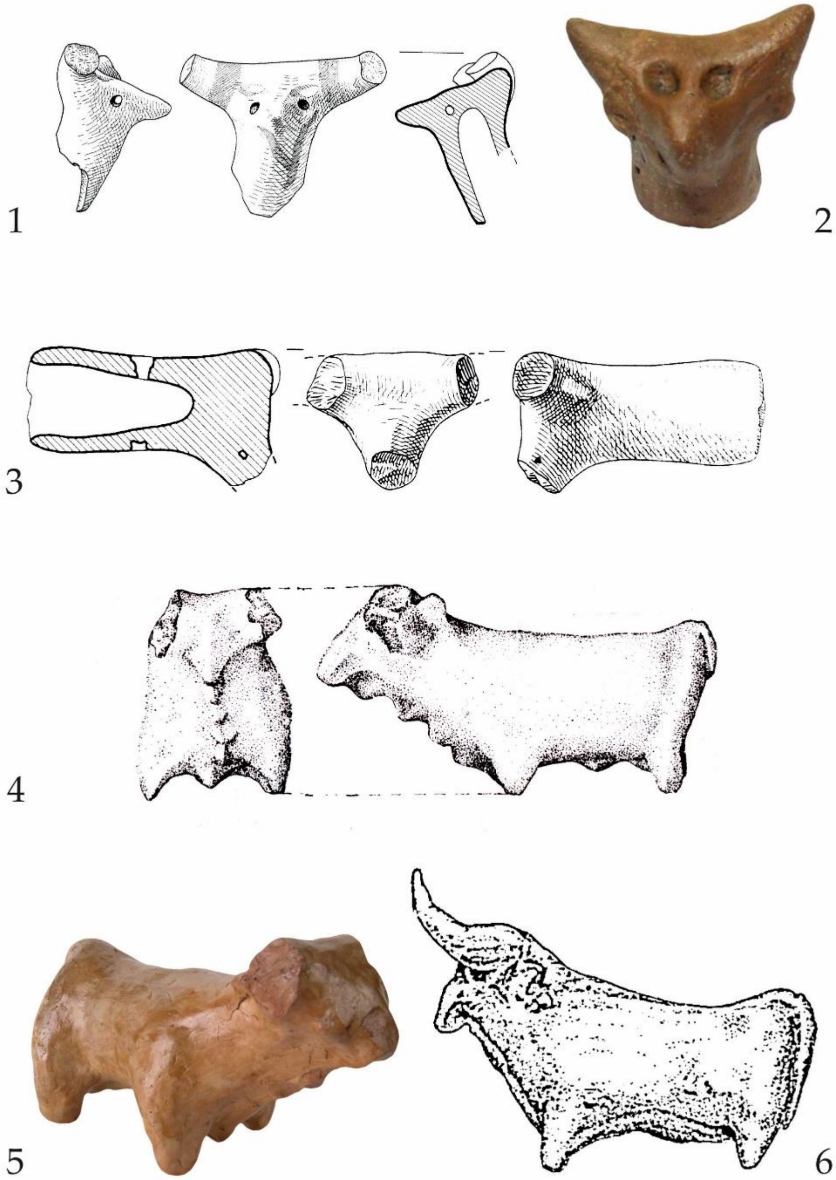


Plate 2. Clay „scepters" and zoomorphic statuettes: 1, 3. Drăgușeni (Botoșani county, Romania); 2, 4. Trușești (Botoșani county, Romania); 5. Valea Lupului (Iași county, Romania); 6. Mihoveni (Suceava county, Romania) (different scales) (1, 3. after Marinescu-Bîlcu and Bolomey 2000, fig. 174/3, 175/5; 2. after Lazarovici, Lazarovici and Țurcanu 2009, cat. no. 123; 4. after Petrescu-Dîmbovița, Florescu and Florescu 1999, fig. 374/8; 5. after Stratulat et al. 2008, cat. no. R218; 6. after Batariuc, Haimovici and Niculică 2000-2001, fig. 2/1).

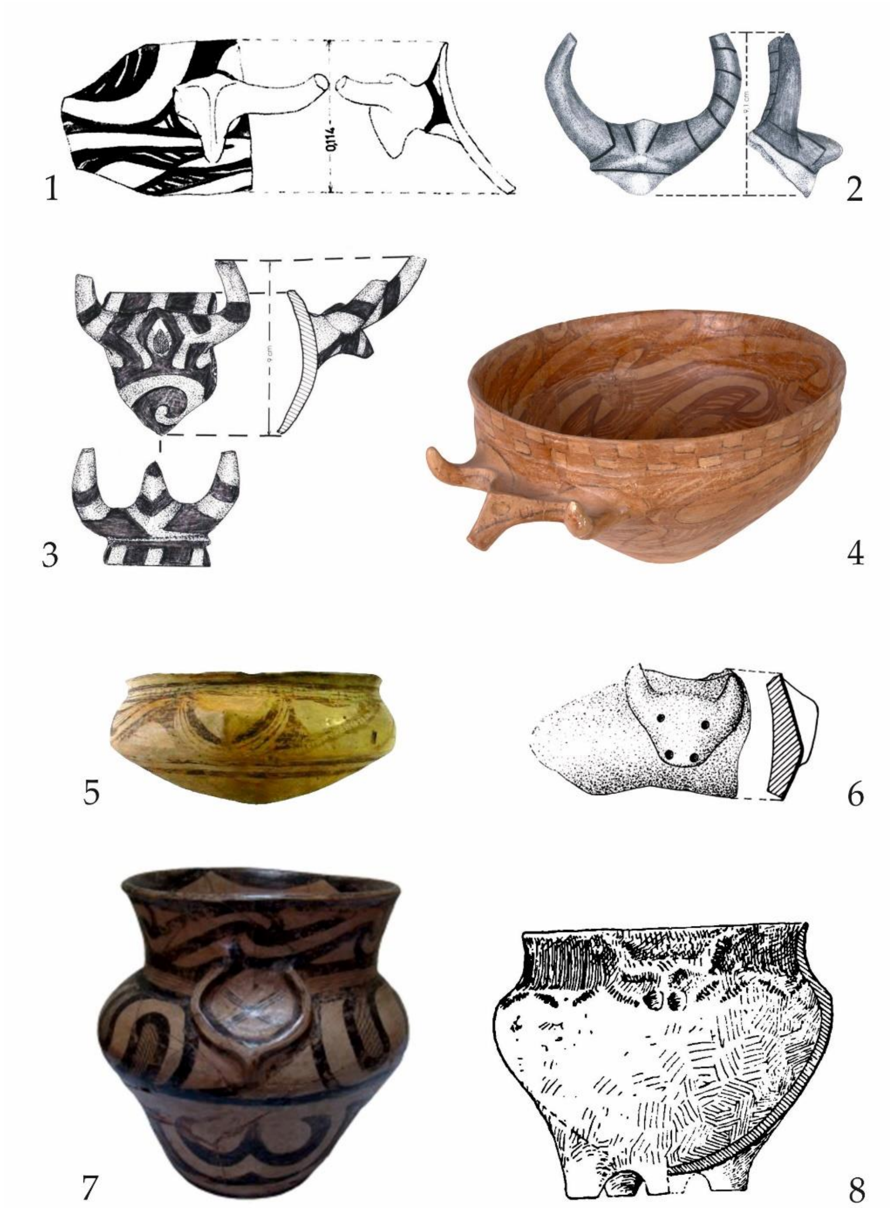


Plate 3. Alto-relief and bas-relief representations: 1. Trușești (Botoșani county, Romania); 2-3. Hoișești (Iași county, Romania); 4. Poienești (Vaslui county, Romania); 5. Cucuteni (Iași county, Romania); 6. Văleni (Neamț county, Romania); 7. Târgu Ocna (Bacău county, Romania); 8. Frumușica (Neamț county, Romania) (different scales) (1. after Petrescu-Dîmbovița, Florescu and Florescu 1999, fig. 290/1; 2-3. after Bodi 2010, pl. 60/4, 62/1; 4. after Lazarovici and Babeș 2015, fig. II.54; 5. after Petrescu-Dîmbovița and Văleanu 2004, fig. 167/11; 6. after Cucoș 1999, fig. 70/1; 7. after Preoteasa 2012, fig. 23/6; 8. after Cucoș 1977-1979, fig. 9/7).

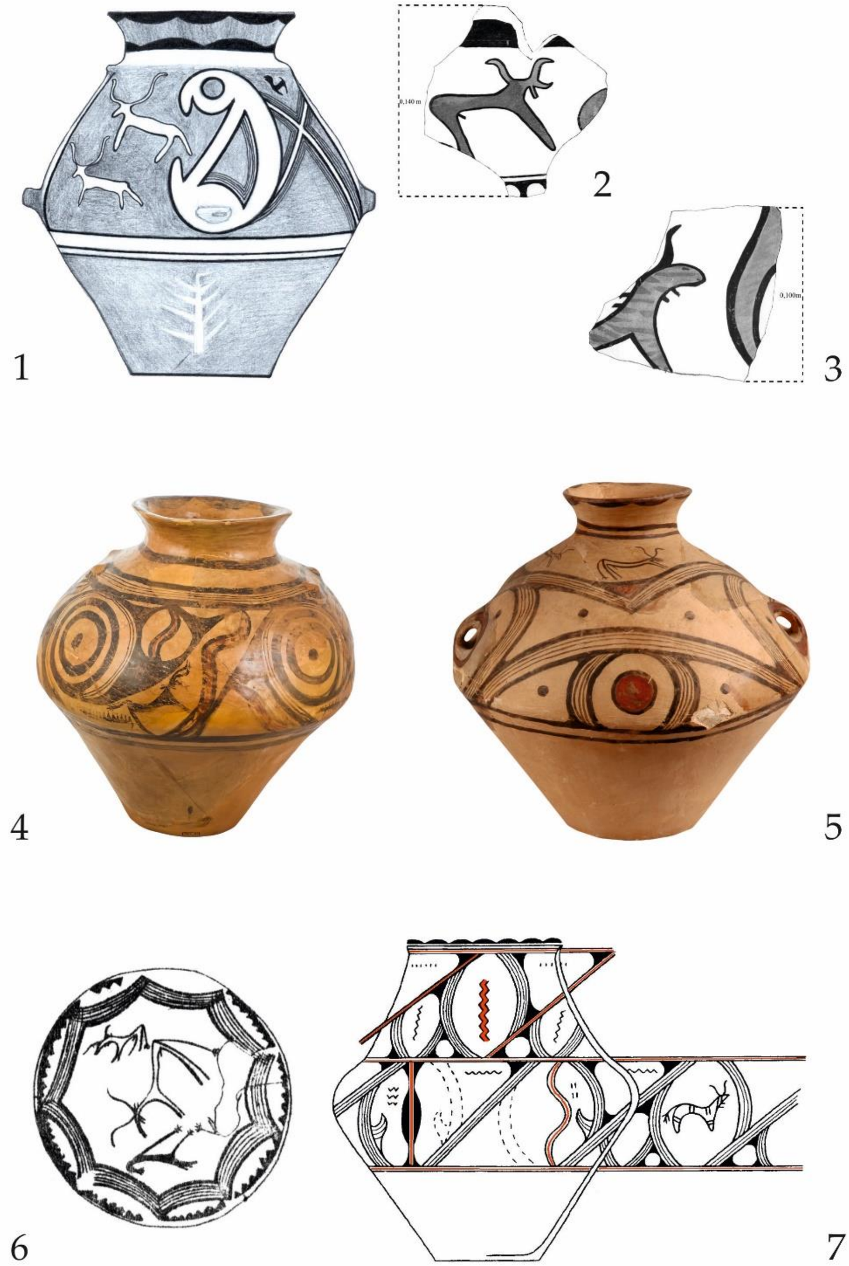


Plate 4. Pottery decorated with painted bovines: 1. Poduri (Bacău county, Romania); 2-3. Valea Lupului (Iași county, Romania); 4. Iași (Iași county, Romania); 5. Vărvăreuca XV (Republic of Moldova); 6. Șura I (Republic of Moldova); 7. Bilcze Złote – Werteba (Ukraine) (1. after Dumitroaia et al. 2009, p. 24, fig. 6; 2-3. after Nițu 1972a, fig. 1/1, fig. 2; 5. after Stratulat et al. 2009, cat. no. 113; 6. after Bikbaev 1989, fig. 2/3; 7. after Tkachuk 2013, pl. 20/2).

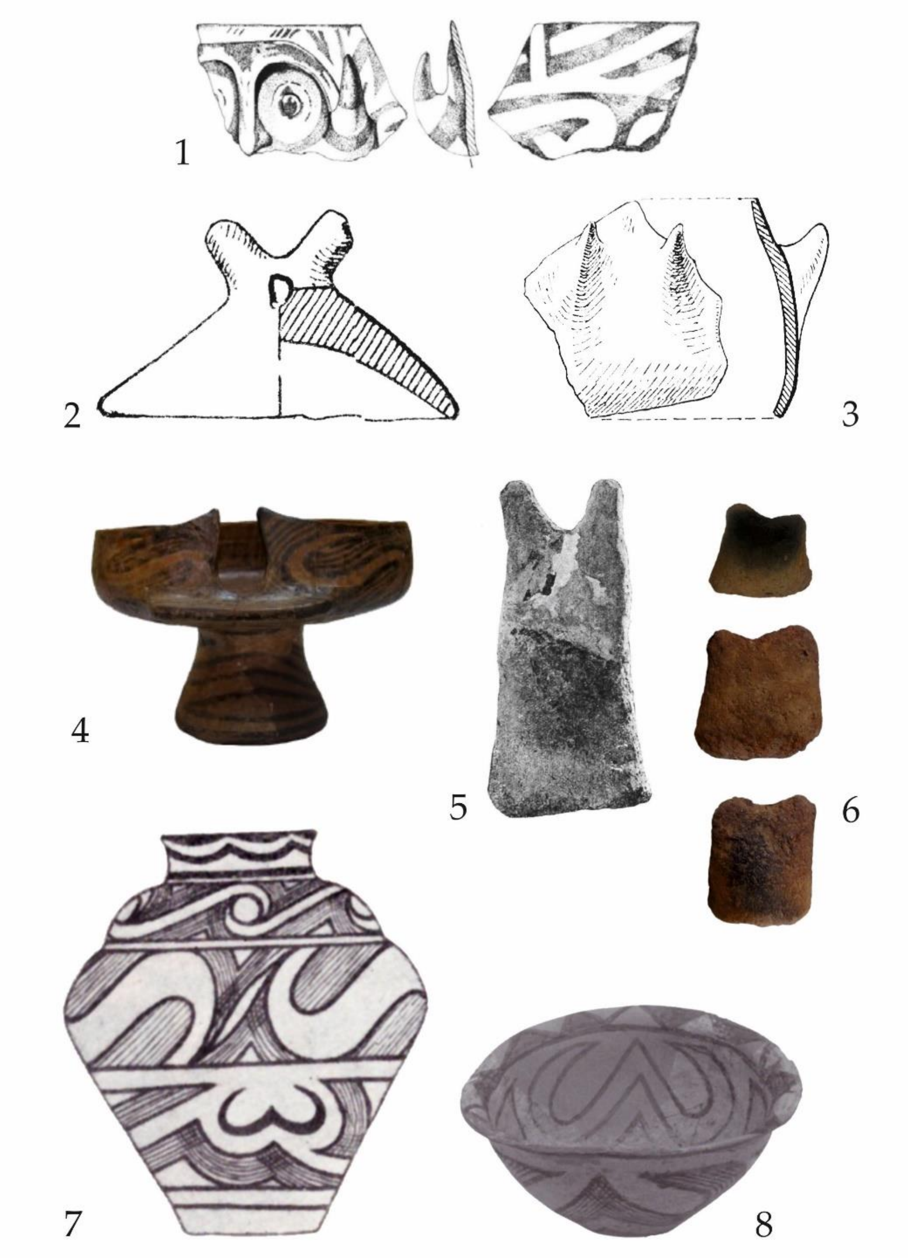


Plate 5. Stylized representations: 1. Ruginoasa (Iași county, Romania); 2-3. Hăbășești (Iași county, Romania); 4. Ghelăiești (Neamț county, Romania); 5. Frumușica (Neamț county, Romania); 6, 8. Poduri (Bacău county, Romania); 7. Târgu Ocna (Bacău county, Romania); (1. after Chirica and Văleanu 2008, fig. 67; 2-3. after Dumitrescu et al. 1954, pl. CXI/38, CXII/20; 4, 6. after Preoteasa 2012, fig. 22/2, fig. 15; 5. after Matasă 1946, pl. III/1a; 7. after Matasă 1964, fig. 27/2; 8. after Dumitroaia et al. 2009, cat. no. 206)

Reflections on the transcultural need for animal welfare education – Ideas for training students in animal-oriented programs

Alina Simona Rusu *

Abstract

This paper presents a series of critical reflections on the transcultural need for animal welfare education, that were formulated from my perspective as a member of the Higher Education teaching staff in the field of animal-oriented sciences in Romania, with a background in ethology and psychology, as well as a certified Humane Educator. The critical reflections are based on performing a comparative narrative analysis of the literature, specifically of two research papers addressing the need for animal welfare education from an early age and the recommendations for training Higher Education students enrolled in study programs in animal-care professions.

Keywords

animal cruelty prevention; animal welfare education; care for life

Introduction

The main objective of this paper is to present a series of critical reflections on the transcultural need for animal welfare education, that were formulated from my perspective as a member of Higher Education teaching staff in the field of animal-oriented Sciences in Romania (i.e. coordinator of the Master's Degree program "Ethology & Human-Animal Interaction" at University of Agricultural Sciences and Veterinary Medicine of Cluj-Napoca), with a background in ethology and psychology, as well as a certified Humane Educator. For more than two decades, in my teaching activities on various animal-

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oriented subjects, such as Animal Psychology, Animal Assisted Therapy, Animal Cognition, and Consciousness, as well as Animals in Society (bachelor's and master's degree levels), I have included curricular-related activities aiming to involve the students in meaningful interactions with people, animals, and the environment. These activities are always constructed and implemented through collaborations with representatives of the community, such as local, national, and international organizations, particularly Non-Governmental Organizations (NGOs), that are not only familiar with the existent legislative frames in the areas of animal protection and wildlife conservation, but also with the diverse needs of animals and humans coexisting in various spaces, that could be addressed by future specialists in applied anthrozoology (Rusu, Criste, and Dezmirean 2021).

The reflections presented here are based on performing a comparative narrative analysis of the literature, specifically of two research papers addressing the need for animal welfare education from an early age and the recommendations for training Higher Education students enrolled in study programs in the animal-care profession. Both studies identified these needs by analyzing the reflections collected from experienced professionals of animal protection and human-animal interactions in Romania and the UK.

Both research papers analyzed here are currently included as learning resources in the curricular offering of the students enrolled in the master's degree program "Ethology and Human-Animal Interaction". The first paper is entitled "*Voices of NGOs supporting the first master's degree program in ethology and human-animal interactions in Romania: A thematic analysis*" (Rusu, Criste and Dezmirean 2021) and the second one is entitled *"Establishing consensus on the best ways to educate children about animal welfare and prevent harm: an online Delphi study"* (Muldoon and Williams 2021).

On the need for Animal Welfare Education in Romania

The study done by Rusu, Criste, and Dezmirean (2021) investigated through a qualitative thematic analysis the written reflections of six representatives of NGOs in the areas of animal protection and wildlife conservation in Romania regarding the roles of the academically trained professionals in ethology and human-animal interaction. The study was conducted in the context of developing the master's degree program "Ethology and Human-Animal Interaction" at the University of Agricultural Sciences and Veterinary Medicine Cluj-Napoca, Romania. The qualitative data analysis of the raw data was performed following the hands-on guide on thematic content analysis, allowing the identification of two main themes (Erlingsson and Brysiewicz 2018).

The first theme identified by the authors, which refers to the concerns over animal welfare and negative human-animal interactions in Romania, included seven categories of codes: concerns over stray animals, lack of education of the general population on HAI and animal welfare, maltreatment of animals, human-animal conflicts, lack of professional specializations in HAI, concerns over common global issues, and concerns over national nature conservation (Rusu, Criste, and Dezmirean 2021). The code "lack of education" was the most frequent one and it appeared associated with various attributes, such as "serious", "problematic", and "with severe consequences".

The lack of education regarding responsible ownership, and treatment of companion and wild animals, appeared in all six written reflections with a frequency of 2 to 6 times, being associated with several categories of factors, such as age (kindergarten children, adolescents, adults), statuses and roles (parents, animal guardians, school staff, tourists, Zoo visitors) and locations (urban, rural, protected areas). The codes identified within the "maltreatment of

community and companion animals" (e.g., forms of cruelty towards animals, such as aggression, extreme violence, abandonment, and neglect), were always presented in association with the perceived lack of adequate education in the area of animal welfare, animal protection legislation. Also, the participants indicated a high level of ignorance expressed by a large proportion of the people regarding the current local, national, and European legislative measures in animal welfare and protection (Rusu, Criste, and Dezmirean 2021).

The second theme refers to the expectations regarding the roles of the graduates of animal-oriented master's degree programs in Romania, and it includes four categories of codes: agents for change towards responsible community, problem solvers, public policy makers, and providers of competence-based expertise. It is important to mention that the interpretation of these codes has considered the fact that, while human-animal study programs around the world generally include Animal Welfare Education in their curricular offerings, up to 2021, Romania was one of the EU countries with no specialized degree programs in human-animal studies. Subjects such as ethology and animal welfare, or elements related to these subjects, were however found in the curricular offerings of veterinary medicine, biology, animal husbandry, and ecology, within several graduate and undergraduate programs. One can easily infer that all these needs expressed by experienced hands-on practitioners in animal management and properly trained educators should reach out to all the categories of learners and can address animal protection programs in Romania.

As one of the teaching staff and coordinator of the master's degree program in Ethology & Human-Animal Interaction, I consider that one of the approaches to training educators with proper skills in Animal Welfare education is the infusion in the curricular offerings of *humane education* theoretical and procedural knowledge. Humane

education represents an efficient and meaningful educational approach through which responsible empathy and compassion towards humans, animals, and the environment, can be nourished and cultivated in learners, starting from an early age (Ascione 2010; Rusu 2020).

Humane education elements are currently introduced in various subjects, such as "Animal in Society and Humane Education", "Psychology applied to Anthrozoology", and "Animal Behavior and Welfare". In terms of building meaningful learning experiences connected to Animal Welfare education, students are encouraged to participate as volunteers or to implement Service-Learning activities, in collaboration with representatives of the community, such as non-governmental associations in animal protection, veterinary social work, and wildlife conservation. Service-learning is commonly defined as an educational strategy that combines service and learning in innovative ways, allowing critical reflections to take place during all the stages, from planning to implementation and celebration (Ćulum Ilić, Brozmanová Gregorová and Rusu 2021).

Views of international experts on ways to train Animal Welfare Educators

In the second paper that serves as material for the reflections presented here, Muldoon and Williams (2021) collected and interpreted views of internationally experienced professionals, aiming to identify consensus and priorities regarding the training of AW educators and key components of effective interventions. As in the case of the paper published by Rusu, Criste, and Dezmirean (2021), the authors acknowledged the fact that most of the existent educational interventions to promote animal welfare and cruelty prevention among young children are offered by organizations.

The study aimed to identify the challenges facing practitioners in the field of animal welfare, to prevent and manage these challenges in the future. The methodological approach consisted of a three-stage online Delphi study, in which 31 experts were included in the first round of data collection, representing 11 organizations in the Scottish Animal Welfare Education Forum, 11 members of UK-based Animal Welfare Education Alliance, and seven professionals from Canada and the US (Muldoon and Williams 2021). Most of the participants got in the second round, where a high level of consensus was reported following the analysis of their responses. The data revealed areas of ambiguity in regard to the terminology and whether animal welfare to be part of school curricula. The findings were used by the authors to develop a toolkit to enable current and future practitioners to follow evidence-based guidance when planning and implementing AWE, as well as when training volunteers in animal welfare-oriented outreach programs.

The survey started with the collection of individual definitions participants' definitions of cruelty, which were later on presented to the participants to identify their level of consensus. The authors indicate that there was consensus on the two definitions that cruelty represents deliberate/intentional harm, injury, pain, or fear and, or unnecessary harm/suffering that could be intentional or unintentional, direct, or indirect. There was a high level of consensus that a child's behavior, i.e. in terms of expressing cruelty to animals, cannot be separated from the immediate environment they find themselves in (such as the family environment), and that it can signal vulnerability. When asked which three causes are most important to address in animal welfare interventions, the respondents agreed on the lack of education, referring to poor knowledge of animal welfare needs and animal sentience (Muldoon and Williams 2021).

An important finding of the study is represented by the views expressed by the participants when asked how important it was to teach children and young people about animal welfare. The justification was provided for their responses, allowing the authors to further identify a percentage of 100% agreement on two statements emerging from the collected responses. The participants completely agree that AWE offered to young learners can strongly contribute to the development of meaningful life skills, fostering prosocial attitudes and helping-others' behaviors, such as empathy, compassion, and self-understanding, which it is important because animal welfare, public health, human wellbeing, and the environment are interconnected. The last statement agreed upon by all the participants indicates similarities to the Humane Education framework, as well as to the One Health - One Welfare approach, i.e. "*learning about animal welfare should also contribute to increased concern about all sentient beings and the wider environment in which we live*" (Muldoon and Williams 2021).

In the same direction, the authors indicate that there was a high level of agreement that Animal Welfare education is fundamental to the following aspects: creating a caring compassionate world, improving knowledge of animal needs, sentience and how to care properly and have respect for animals, eliminating unintentional cruelty, and to instill a sense of responsibility and empowerment so that people will make positive decisions and actions for animals. A very high level of consensus was expressed concerning the importance of safeguarding children and animals, especially about understanding animal behavior/signals and appropriate handling (Muldoon and Williams 2021).

In terms of perceived gaps in current provision, there was strong consensus among the animal welfare experts concerning the notion that AWE should be embedded within the school curriculum and that specific categories, such as teenagers and at risk/vulnerable

children/young people represent neglected groups. Compared to the reflections provided by the representatives of the NGOs in animal protection in Romania (Rusu, Criste, and Dezmirean 2021), in the study by Muldoon and Williams, (2021), there was no consensus on whether animal welfare prevention not currently recognized as important in society reflects a gap in provision or the lack of skills-based education. However, the participants of the international Delphi survey, similar to the representatives of the animal protection NGOs in Romania, agreed on the importance of embedding the Animal Welfare/ Animal Cruelty Prevention area within formal school education.

The recommendation of Muldoon and Williams (2021) in terms of helping embed animal welfare within UK school education systems, refers to the fact that the terminology might usefully focus on familiar terms, such as 'responsible citizenship', 'personal and social education' (PSE) or 'social and emotional learning' (SEL), 'science, technology, engineering and mathematics (STEM). The authors mentioned that it is important to recognize that the different approaches and curricula across nations may afford different opportunities for integrating AWE. Partnership with teachers is considered an important step in the process of presenting a case for curricular inclusion to policymakers in the area of national education systems. Based on the valuable findings of their Delphi survey, the authors recommend that Animal Welfare Education experts develop *"…a shared understanding as to the terminology and definitions to be used in the field, either when discussing at a strategic level or with intervention participants/stakeholders"* (Muldoon and Williams 2021).

Concluding remarks: Who should offer Animal Welfare Education?

An important aspect that was carefully discussed in the study of Muldoon and Williams (2021) refers to the lack of consensus among the participants on the ideal facilitators for the delivery of Animal

Welfare education and interventions, except for animal welfare professionals who are skilled educators. These findings are in line with the results of the qualitative analysis performed in Romania, where graduates of animal-oriented programs are expected by the representatives of animal protection NGOs to have the theoretical and procedural knowledge for delivery of AWE (Rusu, Criste, and Dezmirean 2021). Although some of the participants in the Delphi survey indicated that class teachers could deliver AWE, the authors argue that whilst schoolteachers are generally trained child educators, they do not always have the necessarily detailed knowledge of animals or their welfare (Muldoon and Williams 2021).

In my personal view as a teacher in Higher Education, a solution to the need described above would be the development and implementation of short-term training courses/modules for school teachers, that could offer them the knowledge and the skills needed for delivering AWE to various categories of learners. Also, I consider it important that the students enrolled in Animal Behavior and Welfare programs should be encouraged to enroll in the pre-service teaching module / pedagogical training so that they have proper skills and readiness for delivering formal education (and other forms). Also, as indicated by Muldoon and Williams (2021), there is a need for AWE specialists to work closely with schoolteachers, such as that the AWE should become a co-constructed process, addressing both animal welfare expertise and teachers' knowledge of how children (or other categories of students) learn, effective pedagogy (including socio-emotional learning, Service-Learning, etc.) and mechanisms of change.

In line with the fact that Animal Welfare Education is a component of the Humane Education approach, which fosters respect for people, animals, and the environment (e.g. Beaver 2005), as a Humane Educator myself, I recommend embracing the idea presented by Muldoon and Williams (2021) in their conclusion section, which

states that it may be necessary to expand the terms AWE and cruelty prevention, or even abandon them altogether in favor of ***Caring for Life*** interventions and education. According to the authors, this term could more easily encompass the aspects of animals as sentient beings, the positive and negative behaviors in the context of human-animal interactions, and not just be limited to caring for the basic needs or freedoms of animals.

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Interdisciplinary Learning Objectives for Animal Cruelty Prevention Programs

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Abstract

Various forms of animal cruelty, from neglect to physical violence, can be found in the history of humankind. In the last years, increasing attention has started to be offered to the roles of awareness and education in the direction of their prevention. Hence, in the last 40 years, there has been so much research done that attests to a strong connection between animal cruelty and domestic violence, emotional, physical and/or sexual abuse, and bullying, just to name a few.

This is an ongoing study now, and it will be the foundation of my PhD thesis. It consists of designing interdisciplinary learning objectives that can be incorporated into educational programmes addressing the prevention of animal cruelty in adolescents. The method is based on literature analysis and the 10-step process of interdisciplinary curriculum design.

The four learning objectives presented here are developed following the One Health, One Welfare paradigm, as well as in line with the need for growing compassionate leaders, able to interact in a responsible and empathy-driven manner with any other being and with the environment. In this sense, Service-Learning competencies represent an important component of the proposed learning objectives. Service-Learning activities, as part of Humane Education, are possibly the most efficient in terms of animal cruelty prevention, because they involve the participants in their community in a meaningful experiential way, showing them how to internalise healthy life principles, responsible human-animal interactions, how to develop coping mechanisms to stress, and what does it mean to behave and think in an empathic way towards people, animals, and environment.

Keywords

animal cruelty; interdisciplinary learning objectives; empathy; Service-Learning; prevention

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In many societies around the world, animals have become such an important part of our ecologies, being considered family members or, in some cases, even replacing them. The reason for this close co-existence is mainly because people understand that animals are sentient beings and can experience positive and negative emotions, just like humans do. There have been lots of studies proving this, but in most cases, regular people have made these assumptions simply by interacting with them in their day-to-day lives. There are also lots of benefits of responsible and healthy interactions between humans and animals. Not only does it improve physical health because it boosts immunity, but it also helps maintain a healthy mind. This is why it is necessary to teach the younger generations how to responsibly interact with animals. This way, the concept of "One Health, One Welfare" can be spread around the world. However, not every human-animal interaction is a positive one. There are certain situations in which individuals display cruel and violent behaviour towards animals and reasons may vary from education or culture to ulterior motives or psychiatric disorders. Regardless of this, showing signs of animal cruelty is not something socially or morally accepted, and it might indicate problematic behaviour and serious psychological issues at individual, group, and societal levels. With so much information floating around and so many studies being conducted, we consider that it is important to act, and what better way to do it than by educating the younger generations. Throughout the next pages, I will analyse research that has been done on animal cruelty and its psychological aspects as well as how important and useful Service-Learning projects are, as components of Humane Education. At the end of it, I will also present an example of a 6 service-learning project for the prevention of animal cruelty for teenagers. All these aspects will be incorporated within the interdisciplinary learning objectives

that can be further used for planning an intervention programme for animal cruelty prevention.

Interactions between adolescents and animals

For thousands of years humans have co-existed with animals, and in the last decades scientists have started to investigate the benefits of this long co-existence. They concluded that there are more benefits than risks for the physical and mental health of the individual (Cherniack and Cherniack 2015). Also, more and more studies show the benefits of owning a pet for children and teenagers and how much it helps with an overall healthy development.

As everybody is aware, the teenage years are very challenging for many reasons. You try to find your independence, hang out with your friends more, and start caring about their opinions way more than anything and you want to experiment with new things. In other words, you start to discover who you are. However, because there are so many things changing and there is a lot of pressure coming from the parents, school, teachers, etc., it can get very intense very quickly, and one might experience anxiety and/or depression. We live in 2024, and social media plays an extremely important role and there are means of communication worldwide, so everybody is constantly bombarded with good, but mostly, bad news. Inevitably, these conglomerates of information, alongside the changes that naturally take place in someone’s life create the perfect environment for unstable mental health. In 2021, globally, one in seven 10-19-year-olds experienced a mental health disorder (depression, anxiety, and behavioural disorders being the most common, WHO 2022, who.int). Unfortunately, untreated mental disorders can cause, in some cases, suicide, which, in 2021, was the fourth leading cause of death among 15-29-year-olds (WHO 2022).

Similarly, the COVID-19 pandemic hit hard not only the economy of the world but also the mental health of everyone, especially teenagers. In Romania, according to Salvați Copiii's reports, during the COVID-19 pandemic, 1 in 3 children, and 50% of teenagers needed psychological counselling for anxiety and other mental disorders (in some cases it led to suicide attempts) (hotnews.ro). Alongside this, the pressure coming from the academic area is as real as it gets. This happens in almost every country because at the end of the day finishing school and getting a degree is part of life.

Because the long-term objective of this study is to test the proposed learning objectives of an intervention programme for animal cruelty prevention in Romania (more specifically, a high school in Cluj-Napoca), I will discuss explicitly about Romanian society. There is a lot of pressure on teenagers and young people to have it all figured out fast and early in life, as well as some mentalities regarding the relation between academic performance and one's abilities to succeed in life. Also, the constant changes in the Romanian school curriculum, organisational aspects, and exams are big stressors in teenagers' lives, as well as in their parents' lives (and that transmits onto the children).

Another aspect that not a lot of people talk about is domestic violence and its impact on teenagers' lives and society. A study made by the United States Department of Justice in 2009 showed that approximately 60% of the kids from the USA experienced at least one form of violence (Finkelhor 2009). Another study, from 2015, showed that the percentage increased to 67.5% (Finkelhor, et al. 2015). In Romania, according to Salvați Copiii (hotnews.ro) at least 1 in two children is exposed to one form of violence (although at present, sexual abuse is the least reported due to stigmatization

and/or normalization). Also, in 2020, 41.5% of children lived in poverty and came from disadvantaged backgrounds.

In Romania, parental immigration is a real problem because it leaves children without parental supervision and moral support (in 2020, 76.170 children lived without parental supervision and approximately 100.000 lived without one or both parents) (hotnews.ro). During the pandemic, as well as the post-pandemic years, according to the Weisser Ring organization, there has been an increase in domestic violence cases (a 20% increase compared to 2018), with the victims' spouses and children (weisser-ring.de).

We consider that is very important to address the challenges of the present, especially when it comes to implementing and starting new projects, and because of that, we must acknowledge the need for mental health education and interventions, especially for teenagers since they are the future. Also, they are still going through cognitive and social development, so it is very important that they learn healthy coping mechanisms to help them deal with stress and delicate situations.

Studies show that pet ownership has plenty of benefits, as I've mentioned earlier, on physical and mental health (Cherniack and Cherniack 2015). According to the American Veterinary Medical Association (2007), approximately 75% of families that have children (5-17-year-olds) own a pet, and in 60% of the cases they own a dog. Also, lately more and more people turn to animal-assisted therapies to deal with their psychological problems (dog therapy, cat therapy, goat therapy, goat/puppy yoga, etc.) (Hull, et al. 2022). Studies have shown that in many domestic violence cases, teenagers also assisted in animal cruelty acts in their families (around 26-60%), so teenagerss empathize with their pets and rely on them to cope with their problems. They talk to the animal about their day/problems (they do a form of debriefing) or just play or pet them to reduce

stress (Matijczak, et al. 2020). Also, the population is rather old, worldwide, so it is more common for a child to own a pet than to have a sibling or grandparents to talk to (Charmaraman, et al. 2020).

The need for a humane education in addressing human-animal interactions

Now what is Humane Education? According to an article published in 2010, "humane education is a form of character education that uses animal-related stories, lessons, and activities to foster respect, kindness, and responsibility in children's relationships with both animals and people" (Faver 2010). This unique form of education can be considered a tool for a better learning process because it involves new methods of teaching while delivering great results. It focuses on developing children's empathy and pro-social behaviours through different lessons and activities, and because of this, it could prevent forms of violence amongst children (Faver 2010).

What makes it so special is the fact that most of the time there are animals that participate in these classes and activities, thus helping the tutor get the message through better and faster, by providing a more natural and safer environment. Children have an affinity for animals and tend to feel more comfortable when they are around them, so it is more likely that they will pay attention to what the teacher is saying and will be more involved in participating (Faver 2010). Also, humane education enhances social and intellectual development and abilities by focusing on children's interests and past encounters with animals.

Research shows that children that are surrounded by animals while growing up have higher levels of emotional and cognitive empathy toward animals and toward other persons (Poresky and Hendrix 1990). Although not all humane education programmes

include the presence of a live animal, they may include stories and/ or games about animals. This way, children's abilities like the "willingness to understand another's perspective (cognition), share another's feelings (affect), and help others (behaviour)" are continuously developed (Faver 2010). They all are attributes of empathy, and so, of pro-social behaviour, including here the acts of kindness and altruism.

Another important aspect of humane education that makes it so useful is the fact that by developing empathy and compassion, it aims to lower the aggression levels in children and educate them from young age about what a healthy human-animal interaction is or that animals do have consciousness. It is especially useful because of the link between children's animal cruelty and domestic violence/human-directed violence (Faver 2010).

For the last decades, animal cruelty at young ages has become a diagnostic criterion for Conduct Disorder (American Psychiatric Association, 1994; 2013), being one of the first symptoms to occur in the beginning, as well as being a predictor in some cases for antisocial behaviour and Antisocial Personality Disorders in some cases, in adolescence and adulthood (Ascione 2005).

What is an interesting observation regarding the lack of empathy or empathy deficits is that they can be a cause and/or a consequence of children's animal cruelty. It is associated with family risk factors, such as physical abuse, sexual abuse, and domestic violence (DeViney, Dickert, and Lockwood 1993; Duncan, Thomas, and Miller 2005; Henry 2006). In families where interpersonal violence happens very frequently, pets are threatened or harmed, which means that children witness the abuse (it also increases the chance of perpetrating it) or take part in it (Faver 2010). It is also associated with bullying (Ascione 1993).

Some theories state that the connection between witnessing / experiencing violence and engaging later in acts of cruelty to animals include 1) role modelling- “imitating violence that has been seen or experienced” and 2) desensitization to violence- “impedes the 12 development of empathy and makes subsequent aggression more likely” (Faver 2010).

Humane education’s main focus was teaching kindness towards animals and, as time passed, The American Society for the Prevention of Cruelty to Animals (ASPCA) was founded by Henry Bergh in 1866, as well as the American Humane Association, whose focus and mission was to protect both children and animals. Currently, it is promoted by three types of organizations: 1) national animal protection organizations (e.g., ASPCA), 2) national non-profit organizations-created to promote humane education (e.g., the National Humane Education Society and the Institute for Humane Education), and 3) community-based animal welfare organizations (e.g., animal shelters) (Faver 2010).

Service-Learning for fostering empathy, compassion, and responsibility to animals

Service-Learning (SL) is a “form of innovative experiential pedagogy that combines learning with service, by addressing the needs of the community” (Rusu and Davis 2018). It is a form of pedagogy that has become more and more popular throughout the years because of its unique way of involving students in the community while developing specific skills and contributing to their learning process (Seifer and Connors 2007).

As I have said throughout this paper, and as I will keep mentioning it in the next pages, humans and animals have co-existed for so long that including them both in social work would give such an important insight into how to handle certain situations, as well

as contributing to speeding the learning process for students or speeding their therapeutical journey (Rusu and Davis 2018).

As Rusu and Davis (2018) mention in their article, the most important reasons for including animals in social work and focusing more on human-animal interactions are the following: 1) "animals are part of family systems/human ecologies"; 2) "there is growing evidence base for the links between animal cruelty and forms of family dysfunctions and criminal behaviour"; and 3) "companion animals add therapeutic value to interventions across diverse age and special needs categories"(Rusu and Davis 2018).

Many studies attest to the benefits of including animals in social work because the simple presence of an animal increases the professional efficiency and work satisfaction of everyone involved in that particular activity (students, clients, volunteers, professionals, and social workers) (Chandler 2005; Fine 2010; Taylor, et al. 2016).

Alongside the psychological benefits of human-animal interactions, researchers have also noticed that there are civic skills being improved by it and humane education programs. Animals are known as catalysts and facilitators in interhuman interactions or to ease the atmosphere just by being present. This way, interactions between humans can be more relaxed, friendly, and with a positive outcome, by increasing participation (Rusu 2017).

One common aspect between SL activities and human-animal interactions is that in both cases there was a significant and positive impact on the level of empathy of students involved (Rusu and Davis 2018). But what exactly is "empathy"? According to the Merriam-Webster dictionary (https://www.merriam-webster.com/dictionary/empathy), empathy is defined as "the action of understanding, being aware of, being sensitive to, and

vicariously experiencing the feelings, thoughts, and experience of another".

Empathy is an essential component of civic engagement through compassion (Rusu and Davis 2018). Studies show that aggressive behaviour towards humans and animals usually lack empathy (Komorosky and O'Neal 2015), so developing this quality through SL and human-animal interactions could ultimately lead to lower levels of aggression in an individual.

Objective

The main objective of the dissertation thesis is, based on critical analysis and synthesis, to develop several interdisciplinary learning objectives that could be included in the planning of animal cruelty prevention programs for adolescents.

Methods

The methodological approach used in this thesis to develop the interdisciplinary learning objectives is represented by the critical analysis of the literature in the fields of human-animal interactions, humane education and forensic psychology, and the model of 10 generic points of interdisciplinary curriculum design (Table 1, Kirkpatrick 1994; Modo and Kinchin, 2011).

In 1994, Kirkpatrick (Kirkpatrick 1994) identified 10 generic points that should be paid attention to when designing a curriculum (Tab. 1). The points indicate the importance of planning and having the objectives and learning outcomes set straight from the beginning, as well as a re-evaluation as time passes.

1.	Establishing the learning needs
2.	Defining learning objectives
3.	Determine an appropriate subject content
4.	Selecting participants
5.	Determining the best schedule
6.	Selecting appropriate facilities
7.	Selecting appropriate instructors
8.	Selecting and preparing audio-visual aids
9.	Coordinating the program
10.	Evaluating the program

Table 1. Steps of interdisciplinary curriculum design (Modo & Kinchin, 2011).

This step is essential to ensure the best quality programmes and to see what adjustments need to be made. Also mentioned by Kirkpatrick (1994) is the fact that the success of a programme is measured by assessing the students' knowledge and skills at the end of the course, as well as receiving feedback from them (Modo and Kinchin 2011).

Results

This chapter presents the three learning objectives that were developed based on the existent literature and on the principles of interdisciplinary curriculum design.

Learning Objective No. 1: Building awareness on the link between domestic violence and animal cruelty

For a very long time, domestic violence and animal cruelty were not linked in any way to one another. They were believed to be two separate matters and treated accordingly. However, after 40 years of studies and research, specialists from human services and animal welfare have established that they are in fact corellated and any sign and/or form of abuse should not be tolerated and treated as a warning signal for future aggression.

After specialists started looking into violence and abuse cases (child maltreatment, elder abuse, domestic violence, and animal abuse) they started seeing other forms of family violence being present and so they started referring to it as "The Link" (nationallinkcoalition.org).

To make all this information available to everyone and raise awareness, they have created The National Link Coalition, which is a nonprofit and multi-disciplinary initiative, that serves as "the National Rescue Center on The Link between Animal Abuse and Human Violence". They have a website which functions as an educational platform with lots of information regarding the subject and a library that contains studies, videos, podcasts, and more, so that the people visiting the website can educate themselves correctly on this matter. Some of the subjects they touch upon are "Domestic Violence and The Link", "Child Protection and The Link", "Children Abusing Animals", and "Preventing Animal Abuse 18? and Human Violence" (Fig.1). It is a trustworthy website that people can rely on to get verified information (nationallinkcoalition.org).



Figure 1. https://nationallinkcoalition.org/what-is-the-link

As mentioned earlier, a category on the Circle of Violence is called "Children Abusing Animals" and when you click on the page it first shows a quote by Margaret Mead saying, "One of the most dangerous things that can happen to a child is to kill or torture an animal and get away with it" (nationallinkcoalition.org).

When children manifest cruel behaviour towards an animal, it can mean one of two things: they are in an exploratory stage of development, or they find pleasure in what they are doing. Regardless, the parent/carer should act, stop the abusive behaviour, and explain to the child why it is not right to act in that manner. The difference between committing acts of violence towards animals on purpose and finding pleasure while doing it and doing is as a form of discovering the world, consists in the frequency of the behaviour, intensity, and motivation behind it (nationallinkcoalition.org). It is essential to know the reasoning behind it so that the parents/carers can take the right measures.

Researchers have connected bullying, physical abuse, sexual abuse, domestic violence, corporal punishment, and any other type of trauma that a child can experience while growing up with one another, as well as with animal abuse and cruelty. When a child experiences a form of trauma while growing up (e.g., being a witness to domestic violence or being the victim of physical abuse), he/she will usually feel worthless and powerless and will try to gain the power back by "recreating" what they saw at home, meaning abusing either a sibling, another child, or an animal. In some animal cruelty cases, the abuser might even record him-/herself and share the disturbing video or even rewatching it so that he/she could feel the pleasant emotions again (nationallinkcoalition.org).

Animal abuse, acts of animal cruelty and/or witnessing somebody repeatedly committing abusive acts towards animals, while growing up, are now considered warning signals that indicate a high risk of juvenile delinquency, violent acts, substance abuse, domestic violence and would need psychological counselling because it may indicate psychiatric disorders (personality disorders, conduct disorders). What happens is that desensitization appears, and the child begins to treat this as something normal and detaches him-/herself from the situation (Becker and French 2004; Baldry 2005).

Learning Objective No. 2: Knowledge about the Cambridge Declaration on Consciousness and the research inspired by it

For many years, abilities like inferring? emotional states and their wider consequences, using emotional information gathered from others, or making predictions of significance based on the emotional states that are being expressed, were thought to be characteristic, and exclusive, to primates (Albuquerque, et al. 2021). However, in 2012, an international group of scientists gathered at The University of Cambridge, started to compare their research regarding conscious experience and related behaviours in human and non-human animals, and so The Cambridge Declaration on Consciousness was published

(fcmconference.org). In the next paragraphs I will be referring to certain aspects mentioned in the declaration.

There have been lots of articles that came out after The Cambridge Declaration on Consciousness, but one article,"Dogs can infer implicit information from human emotional expressions", caught my attention, showing that animals (dogs in particular) are able to "read" us . It was published in 2021 in the Animal Cognition Journal by N. Albuquerque, D. S. Mills, A. Wilkinson, and B. Resende, and as the name suggests, its purpose was to see if dogs (non-human animals) are capable of "actively acquiring information from emotional expressions, infer some form of emotional state, and use this functionally to make decisions" (Albuquerque, et al. 2021).

Van Kleef (2009) states that humans can make inferences regarding the individual ("producer") of the signal, by relying on subjective information. In other words, just by looking at someone, we can tell whether they are in a good mood or not, and if they would like to have a conversation (van Kleef 2009). It is important to mention that even though this happens mostly in adults, children can do it too (Thompson 1987).

Dogs represent an excellent example to illustrate the existence of consciousness in animals, as indicated by the Cambridge Declaration on Consciousness. Besides the fact that for thousands of years dogs have been living very close to humans, there is also evidence of their abilities to perceive, categorize, recognize, and response to human emotional expressions (Albuquerque, et al. 2021). Another important thing to mention is that dogs "can obtain information from humans through passive observations" (Albuquerque, et al. 2021).

To support this idea, I will use Chijiiwa et al.'s (2015) article as an example. The title is Dogs avoid people who behave negatively to their owner: third party affective evaluation. It was published in 2015 in Animal Behaviour Journal and was also cited in the main article we are discussing. The authors started from the idea regarding the way people can do image scoring based on social eavesdropping ("social

evaluation of third-party interactions"), which is necessary for "humans' large-scale cooperative society" (Chijiiwa et al., 2015). To see if domestic dogs have similar abilities to evaluate humans' interactions, they asked 28 owners, alongside their dogs, to take part in this experiment. The results showed that dogs have avoided the people who were not helpful to their owners and had a neutral preference towards the ones who helped them (Chijiiwa, et al. 2015). According to the authors, and other studies, this behaviour is like 3 to 5-month-old infants' studies (Hamlin, et al. 2007, 2010), 3-year-old children study (Vaish, et al. 2010) and tufted capuchin monkey study (Anderson, et al. 2013). Due to the control conditioning during this study, and the actors maintaining a neutral facial expression, the plausible explanation for the way the dogs treated the actors differently is social eavesdropping. This ability is also very likely to improve during the dog's life due to age and social experiences with other humans. In other words, this study shows that animals (domestic dogs in particular) have developed a very high level of social competence (Chijiiwa, et al. 2015).

This article contributes a lot to research in the animal cognition and consciousness area, because in the case of non-human animals the extent to which it occurs is still unknown. Also, until not too long ago, people still believed that animals were not capable of feeling anything or having a consciousness. Due to what has been mentioned, I believe that this article was developed based on a brilliant idea that contributes to the science and understanding of dogs and other animals.

Another article that supports the empirical evidence of dogs having sociocognitive abilities and behaviour is the one written by Passalacqua et al. (2011). Its purpose is to see if the breed and age/experience has any effects on the human-directed gazing behaviour. To prove that they used the "unsolvable task" paradigm and as subjects 3 different groups of dogs (Primitive, Hunting/Herding, and Molossoid). Also, the groups differed based on age (2-month-old puppies, tested before they entered the owner's home to reduce any chance of other life experiences that could

influence the results; 4.5-month-old; adult dogs), so that they would have had different experiences with humans and with motor skills and developed motivation to finish the task. All dogs were kept as pets and had different amounts of experience in human interactions (Passalacqua, et al. 2011).

The results showed that adult dogs in the Hunting/Herding group, unlike the ones from the other two groups, gazed at humans for longer periods when the task became unsolvable. The same situation happened in all different breed groups at the age of 4.5 months. Although at first scientists believed that the primitive group would use human-gazing the least (they are related the most to wolves from a genetic point of view), the results showed that they were on the same level as the ones from the Molossoid breed group, and that the Hunting/Herding group used human gazing more. An explanation would be that this breed was made and used by humans for more work and so this may influence the dogs' communicative behaviour, rather than them being genetically related to wolves (Passalacqua, et al. 2011).

Another aspect of this study was to see if a dogs' age has an impact on human-gazing behaviourr. In the 2-month-old group gazing behaviourr appeared in all three different breed groups, except for a difference in unsolvable trials vs. solvable trials. They were more likely to gaze at humans when confronted with unsolvable tasks. Based on the results in the 4.5-month-old group vs. the adult dogs' groups, they were able to see that the adults gazed at humans sooner and for longer periods of time. The younger group also looked at humans when confronted with unsolvable tasks, but not as long as the older dogs. Adults tend to also use gaze alternation (considered a better indicator of intentional communication). With that being said, all the results from this study show that the main process that shaped human-directed behaviour in dogs is domestication. Also, the differences that come with age suggest that an appropriate human environment is essential for the development of these behaviours (Passalacqua, et al. 2011).

The reason for including these two important studies (Chijiiwa, et al. 2015; Passalacqua, et al. 2011), alongside others, in the introduction part is that they offer essential information about the way dogs collect and differentiate information about their social aspects and their owner's lives. This comes as a theoretical support for the decision of choosing domestic dogs for this study, and for making sure that there is a strong theoretical basis for continuing with this study.

The objective of the study (Albuquerque, et al. 2021) is to investigate how emotional information affects decision-making in a nonhuman animal. Also, there are two main hypotheses: (1) "dogs can infer the potential consequences associated with certain emotional states (…), as evidenced by them making functional use of indirect heterospecific emotional cues" (Albuquerque, et al. 2021) and (2) "dogs do not use this information indiscriminately; rather they take into account different elements of a social problem when using this information" (Albuquerque, et al. 2021). The prediction they made is that if dogs are able to acquire and use, in a functional way, affective information then they should "adjust their behaviour towards the person they perceive to be more positive in the indirect food conditioning" (Albuquerque, et al. 2021). The objective, alongside the two main hypotheses and prediction, is very clearly formulated, which gives an accurate point of view on the study and makes it easier to follow throughout.

Moving on to the methods, the authors mention that they used as subjects 91 dogs (56 females and 35 males) for the final dataset. In the beginning there were 114 healthy adult domestic dogs, but since not all of them met the necessary requirements, 23 were excluded. As stimulus they used a controlled setting, but as close to natural as possible, where all subjects were able to witness social interactions between two unfamiliar humans, that involved differential display of emotional expressions (Albuquerque, et al. 2021). The actors were two Caucasian women. They were the same age and always wore the same clothes (within and between subjects). They had their hair up in a bun,

never wore makeup or jewellery and had no distinct marks visible. Both women underwent training at the beginning of the study so that they would be able to make similar motion expressions and be synchronized in movements. The procedure was the following: each subject was tested in a single experimental session and all testing took place in the same room. The experiment consisted of two phases: (1) an observation phase and (2) a response phase.

(1) The observation phase.

The actors were standing still and quiet, with neutral facial and body expression. They were beside a table with two bowls on it. The dog was positioned 2 meters away from the actors. The two women had to interact in the following way, so that they would create a giver-receiver dynamic: one actor had to pick up an opaque black disc from the table and give it to the other actor and then go back to her initial position (Albuquerque, et al. 2021). As it is also mentioned in the article, the method was used because this common and natural type of interaction can happen between two people and that dogs are familiar with watching. This also has benefits for the scientist because it helps them notice any differences in the way dogs were making the decisions (based on the motivation/role of humans or humans' emotional state). The giver remained neutral throughout the session, while the receiver made different facial expressions (positive, negative, or neutral). The giving and receiving phase took place three times and after that, each actor took a seat and was looking down, reading, with a neutral facial expression. While sitting, the situation proceeded in two ways: (1) each actor was holding a bowl next to them (which gave dogs direct access) and (2) the actors left the bowls on the table, on top of each other, which created an illusion that there is only one bowl (the food was unreachable-indirect access for the dog). Important to mention is that the position of each actor, the role they played (whether they were the giver/receiver), emotional display, and the access to the food were completely randomized (Albuquerque, et al. 2021).

(2) The response phase.

It took place after the interactions between the two actors were over and consisted of the dogs being released and recording of their spontaneous behaviour (30 seconds). During this phase, the actors were forbidden from interacting with the animals. The testing took place only one time so that there wouexist an insurance regarding the independence of the data (it would prevent habituation and learning effects) (Albuquerque, et al. 2021).

After the two phases they analysed the choice behaviour binary (choosing or not making a choice) as well as nominal (specific choice) data. This way they were able to test if the balance and food accessibility had any effects on the decision "to make a certain choice and the specific choices made (approach actors, table or other)" (Albuquerque, et al. 2021).

Also, throughout the experiment, the authors analysed in different conditions, the gazing behaviour (determined by the dogs' head orientation towards a specific part of the actor's body; it offers more information about the body region they collect the information from). Alongside this, they examined looking, body orientation, positioning in the room, and sniffing. As it is mentioned in the article l, we see that looking and gazing are both measured, because although they might be similar at first (both are visual exploration behaviours), they are different. Looking refers to the looking behaviour in general, while gazing refers to the looking behaviour regarding the upper half of the person's body (Albuquerque, et al. 2021). Due to all the measures taken to prevent any contamination of the data (randomized subjects in randomized conditions, actors that were very similar, preventing habituation effects, etc.) and the variable they analysed, I can say that the authors were very careful and took the experiment seriously. Also, I believe that they used the best methods to collect the data they needed.

Next up, I'm going to touch upon the results of the study. As a subchapter, the authors mentioned factors that affected the choice of dogs. Throughout the trials, there was a significant difference regarding the frequency of choosing vs. not choosing in all groups (there was a choice in 93% positive, 65% neutral, and 58% negative trials). It is mentioned that there was no sign of side bias in the dogs' behaviour, which indicates that all the animals that took part in this study were not responding based on the asymmetry of the room, were biased by the side of the owner or existence of bias towards the owner. Also, dogs were 14 times more likely to choose an actor after seeing a positive emotional exchange, than not choosing. A discriminative response was found to be 27 dependents on emotional valence, thus a preference for the positive actor: in positive conditions, they chose the receiver (happy, 68%) more than the giver (neutral, 32%), while in negative conditions they went for the giver (neutral, 95%) rather than the receiver (angry, 5%) (Albuquerque, et al. 2021).

When it comes to the impact of emotional expression on dogs, the emotional reaction of the receiver was found to be the one that affected the gazing and body orientation. In positive conditions, the dogs were gazing at the upper body of the happy actor, for a longer period, and in negative conditions, they were gazing longer at the upper body of the neutral actor. Also, in positive conditions, they were oriented towards the emotional actor for a longer amount of time, in comparison to those in negative conditions. It is mentioned that all results are consistent with the active acquisition of emotional information, as well as their subsequent approach preferences (Albuquerque, et al. 2021).

There was also a noticeable impact of food accessibility on dogs' decision-making. They were 30 times more likely to make a choice if there was direct access to the food, but it did not influence gazing allocation, the direction they looked towards, body orientation, sniffing, or the area they stayed in. However, they did sniff more, oriented their body, and stayed around the neutral actor (the giver) in direct conditions, compared to indirect decisions. The valence of the

receiver (happy or angry) did not matter, which indicated a preference for obtaining resources from the actor who was not emotionally expressive (Albuquerque, et al. 2021).

The concluding results of this chapter show that all the data collected is clearly presented. It is in accordance with the objective and hypotheses, and is very well structured (in subchapters), so that the reader knows exactly where to look for the specific results.

Moving on to the discussion chapter, we can see the way the authors have interpreted the results in relation to other studies. What was observed is that in most situations where dogs did not have direct access to food, they started using humans as "tools". They showed a more discriminative behaviour when they had to get help from humans. What does it mean? For them to solve ecologically relevant problems, dogs must actively acquire information, from affective cues produced by people, and make a functional use out of them. To do that, they must be able to infer humans' emotional states from representations generated and stored in their memory, based on previous experience with different types of stimuli (Albuquerque, et al. 2021). Until now, this ability was only known to be characteristic to humans, but this study shows that it occurs in dogs as well, even though the information is available from the passive observation of third-party interactions. Throughout the testing trials, they had to infer any potential consequences of the emotional exchange they have ever witnessed and make a choice based on that information (Albuquerque, et al. 2021). It is also mentioned that the dogs' choice was not influenced by the action that the actor was doing (giving or receiving). As Horn et al. (2011) mentioned, dogs rely only on emotional information, although they perceive humans as potential helpers for their problems (Horn, et al. 2011) and can have preferences for people who act cooperatively (Albuquerque, et al. 2021; Chijiiwa, et al. 2015).

This study has made an extraordinary discovery. Not only do we now have evidence that inferring emotional states and consequences is

not only found in humans, but it shows that this characteristic is present in animals that are not close (phylogenetically) to humans.

If we make a parallel between this article (Albuquerque, et al. 2021) and The Cambridge Declaration on Consciousness (fcmconference.org), we see that change is being made around the world to educate ourselves and change the way animals (domestic or wild) are perceived. In my opinion, the first bullet from the Declaration is the one that relates the most to what I have talked about throughout the essay and to what Albuquerque et al. (2021) said in their article. It is mentioned that "The field of Consciousness research is rapidly evolving. Abundant new techniques and strategies for human and non-human animal research have been developed. Consequently, more data is becoming readily available, and this calls for a periodic re-evaluation of previously held preconceptions in this field."

Studies of non-human animals have shown that homologous brain circuits correlated with conscious experience and perception can be selectively facilitated and disrupted to assess whether they are in fact necessary for those experiences. Moreover, in humans, new non-invasive techniques are readily available to survey the correlates of consciousness." This only means that to evolve as a species, we must understand that there is so much more than we know. And this applies in every aspect of life. With all the research that has been done, and that is still in the making, we know for a fact that animals have a consciousness and that they can feel emotions (happiness, fear, pain, grief, etc.) just like humans. We must stop considering them objects. This is another reason why there should be more laws to protect them and to give them a better quality of life. Although not many people are aware of these facts, or about animal welfare, more and more people and organizations are starting to appear and fight for animals' rights.

Animal welfare and animal rights are two different topics, but they must coexist for change to occur successfully. We must implement certain laws to force people to "align with the trend". Because so much research has been done on the topic of Animal Cognition and

Consciousness, all the results should be implemented in the field of Animal Welfare. Now we must be aware of the importance of clean space (clean air, clean hay, etc.,) in farms so that all farm animals live a healthy life, as close to nature as possible. Also, the food that they are given should be carefully chosen so that it provides all the nutrients they need, and the water should always be fresh. If we are talking about pets, we need to be aware of the space we keep them ("do they have access outdoor or not?"), do we have enrichment objects around the house so they can still act or play like they are in the wild, can we afford all the costs that come with it, and so on and so forth. These are not difficult things one has to ask themselves or do at home/in farms. The problem comes with implementing them because of the lack of education and respect towards other forms of lives there is around the world.

If we analyse the results from this study by referring to the multidimensional model of consciousness (Birch, et al. 2020), we could talk about perpetual richness (p-richness). Animals vary when it comes to the level of detail with which they consciously perceive aspects of the environment. As was seen in the article written by Passalacqua et al. (2011), even if we are talking about the same species (dogs), we see differences in the way different breeds perceive the environment. In other words, some species/breeds might have richer p-experiences than another in one aspect, but less rich experiences in others. Based on the results from Albuquerque et al.'s (2021) study, regarding this model, not all animals might have the same abilities to acquire all the characteristics. As we've seen, the authors have only used domestic dogs for the experiment.

The authors mention at the end of the article some new directions of research. They recommend that in the future, studies will also touch on dogs' sex, breed, age, or length of time living with their owners, but also trying to assess these characteristics in other species, looking at other emotional expressions or exploring other sensory modalities.

All these ideas will contribute to a deeper understanding of the emotion recognition and inference, and their underlying mechanisms in animals. If I had to suggest future directions for research in this area, I would also highly recommend focusing on other species as well. Maybe even make a comparison between domestic and wild animals to see if this characteristic is specific to domesticated animals or not. This way we will be able to see the influence of humans. Also, I would maybe suggest doing the same experiment, but in different countries to see if the culture in which the dog (and owner) is raised has any impact on the way dogs (or other animals) are able to acquire these abilities.

Learning Objective No. 3: Abilities of planning a Service-Learning programme integrating positive human-animal interactions

As mentioned above, it is essential to develop programmes that can teach the new generation how important it is to interact with animals the right way and to learn how to respect them. Service-Learning programs, as part of the Humane Education, focus on learning and enhancing pro-social abilities by getting involved in the community and giving back to it, while developing empathy, compassion, and healthy coping mechanisms.

Up next, I will present a Service-Learning proposal for workshops that can be implemented in schools. The project's name will be *Kids and Animals for a Better Future,* and its main purpose is to teach children what healthy interaction between humans and animals looks like and how both parties benefit from it.

Nowadays, people have become more educated, or at least more informed, and started to pay attention to what's happening around them, and as I've mentioned previously, there are so many studies being made on animal behaviour and consciousness that it has become clear that animals are intelligent and sentient beings. Because of this, we should act and educate people on how important it is to try and

reduce the rates of violence and cruelty towards animals and identify the abusers from young ages to prevent other crimes they may commit.

The workshops aim to address the problem of cruelty towards animals and how to identify/prevent it through Service-Learning. It will take place during "Săptămâna Altfel" week, in Cluj-Napoca, and its main objective is educating the students. This way they can become aware of the surroundings and identify possible cases of animal cruelty and abuse and know how to act accordingly. Also, throughout the day they'll be able to play with dogs from local dog shelters. This will happen during the breaks, and it will give them the opportunity to socialize with animals and feel a better connection with them.

The materials presented in the workshop are going to be age-adapted for every single group, meaning that the volume of information or sensitive topics will be censored so it does not cause anxiety or emotional damage. In the table below I'll list the short-term objectives of the project, as well as the long-term ones (Table 2).

SHORT - TERM OBJECTIVES	LONG - TERM OBJECTIVE S
Students will learn what are the signs of animal cruelty	Raise awareness regarding animal cruelty
Students will learn what are the signs that point towards an animal abuser	Raise awareness regarding the multiple effects of animal cruelty (for animals, humans, society)
Students will learn what they have to do and how to act when they are confronted with such a situation	To identify signs of animal cruelty and abusers
	To educate multiple categories of members of the community (parents, siblings, extended family, friends, or other people living in their town)

Table 2. Short and long-term objectives of the proposed Service-Learning project.

We consider that it is mandatory to know who is already involved in providing support with this issue because it helps to see what works or doesn't work, how others deal with the problem, what topics are they focusing on and what is the audience they're targeting. In Romania, and especially in Cluj-Napoca, there are numerous NGOs that deal with animal rights and animal cruelty cases by saving animals that are in need, offering them medical care and a shelter until they get healthier and find a new family. Because there are so many cases it can be very difficult for the NGOs to reach them all because they are overbooked and overworked. Local authorities also have started paying more attention to the issue and have established the Animal Police Unit. Although all the parties involved are trying their best to save animals, the main focus is not on teaching children how to be advocates for animals or how to act when they witness animal cruelty and abuse.

Through this proposed Service-Learning programme I want to address the root of this problem and be a part of the change using education. The young generation can change the future, so if we want to see an improvement, we should change the perspective from a young age. Also, because it is difficult to start a project like this on your own, it is essential to have support from local authorities (police and animal police, high schools, UASVM Cluj-Napoca, etc.), specialists (psychologists, teachers, social workers), NGOs (NUKA Shelter, ICare, Green Cats, etc.) or just from the parents of the students involved.

Alongside the main topic of this service-learning project, there are also subtopics that I am going to explain in the table below (Table 3).

SUB-TOPIC		
What is animal cruelty? What are the implications in our day to day lives?	What types of behaviour indicate that an animal is being abused? What are the signs of animal abuse?	What are the implications of animal cruelty from a psychological point of view? What are the psychological particularities of an abuser and what can happen if there are no measures taken?
Service idea and partner: Meet officers from the Animal Police Department and see what their occupation is and how and with whom they collaborate in animal cruelty cases. Explaining what animal cruelty is. **Partner**: Animal Police Cluj-Napoca	**Service idea and partner:** A seminar explaining how to identify signs that indicate abuse/cruelty, how an abused animal look and acts. Also, what does owning an animal imply? **Partner**: Ethologists that graduated from USAMV Cluj-Napoca	**Service idea and partner:** A seminar explaining what the implications of animal cruelty from a psychological point of view are, the psychological particularities of an abuser, and what can happen if there are no measures taken. **Partner**: Legal Psychologists

Table 3. Sub-topics of the proposed Service-Learning project.

They will have a journal they're going to keep throughout the day of the workshops in which they'll write reflections and conclusions. At the end of the workshop, they will be asked to come up with suggestions for solving, preventing, or lowering the rate of animal cruelty in our city/country.

To ensure that the information is understood by the students and to be able to know the starting point of the conversation and how to adapt the lessons, the children will have to answer some questions at

the beginning of the workshops, during, and at the end. The questions are listed in the table below (Table 4).

PRE-SERVICE REFLECTION ACTIVITY IDEAS AND QUESTIONS	QUESTIONS TO ANSWER IN BETWEEN BREAKS	POST-SERVICE REFLECTION ACTIVITY AND QUESTIONS
What is Service-Learning and how is it different to volunteering?	What did you find surprising regarding the seminar?	What is the most surprising thing you have learnt today?
What do you think animal cruelty is?	Did you have any ideas about the importance of the matter?	Did you expect that the subject we talked about today was so important?
What are the implications of animal cruelty from a psychological point of view?	Is what you have learned today new information, or you already knew it?	Did you expect more measures to be taken in situations like this?
What can you do when you see such a case?		Do you see an optimistic future regarding this issue in Romania?
		Would you like to get involved in activities regarding prevention of animal cruelty?
		Would you have any suggestions to make this workshop better?
		Would you recommend the workshop to others?

Table 4. Reflections activities in the proposed Service-Learning project.

At the beginning of the workshop, the students will have to do a screening to see how they relate to animals and their attitudes towards animal cruelty. At the end of the workshop, they will have to do the

screening again so that we can see whether their attitudes and beliefs have changed after the seminars.

After the screening, they will be given the journal so that they can start answering questions. This will last for maximum 25 minutes, followed by a short 10-minute discussion, as follows:

- First seminar.
- Break.
- Second seminar.
- Break.
- Third seminar.
- Discussion and reflection.
- Closure activity.

After each seminar, they will have to complete the service reflection. After the last seminar, they will have to complete the post service reflection.

Discussions and Conclusions

Because of all the changes and events that are happening right now in the world (COVID-19, Ukrainian-Russian war, climate change, economic crises, etc.), we are constantly bombarded with information 24/7 from different media outlets (TV, newspapers, social media), but with most of it being false. This brings stress and anxiety for all of us. For some categories of the population this is more damaging than for the rest because they are still developing and learning about themselves and the world. I am talking about teenagers. They use social media the most, so they are more likely to feel the pressure from it. Take this and then add the academic pressure, or stress coming from events happening at home (domestic violence). If they live in an unhealthy environment, they are constantly exposed to violence and cruelty and are less likely to learn healthy coping mechanisms. So many studies have been made that show the benefits of owning a pet

for your physical and mental health, and as we all know, they are always dependent on one another (if you are physically healthy, you have a good state of mind and you feel happy and content; if you have mental health issues, they will affect your physical health). Also, so many studies show how important and beneficial the relationship between a child/teenager and their pet/s is (they rely on one another to get through difficult times). Because of that, I do believe that it is so important to teach the young generations about healthy pet ownership and how to live a healthy life in harmony (One Health, One Welfare paradigm).

Because of the research-informed and evidence-based studies showing how beneficial petting a dog or a cat is, and how much it helps to reduce stress, I also believe that allowing institutions to include animal presence in their settings, of course, by paying attention to the wellbeing of both people and animals, and by collaborating with trained experts in ethology and animal-assisted interventions, is crucial if we want a healthy new generation.

The set of interdisciplinary learning objectives proposed in this study are written in a such way to be available to all the educators (formal, informal, non-formal) interested in implementing principle of Humane Education in the direction of preventing animal cruelty and domestic violence.

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Analysis of coexistence and comprehension of law

Cosmin Mărtinaș *

Abstract

Humans who take part and benefit from animal exploitation offer a wide range of arguments against animal liberation. These arguments are often related to the nature of animals and seek to expose a certain ability that animals, supposedly, lack. There are multiple answers to such arguments, but if an analysis could point to a common flaw, supposing there is any, of all these arguments, then the case for animal liberation could be made in the absence of red herrings. Supporters of animal exploitation often claim that the supporters of animal liberation are dogmatic and lack nuance. The problem is that only in the lack of such distractions can the supporters of animal exploitation focus on the nuances that they supposedly seek from the side of animal liberation. The following essay`s main aim is to analyse whether a lack of understanding of law, in the case of some humans, and, most importantly, in the case of non-human animals, would be enough to declare co-existence impossible. Secondly, it will be analysed weather the current treatment of animals in general and farmed animals in particular is consistent with general principles of justice that are already accepted by many humans. The focus will be on the cases in which the animals are being forcefully „sacrificed" for the benefit of humans at the cost of their life. In this context, this essay will provide a proportionality test between those humans who claim, in the literal sense, that they are rightfully owed the life and body of another animal and the animals who, presumably, do not want to die.

Keywords

comprehension of law; existence; coexistence; capital punishment; burden of proof; consistency

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I. Introduction

A. Arguments and their conclusions

Humans may have some concerns when the current treatment of animals is being questioned, and, hence, appeal to a range of arguments to defend animal exploitation. Let us look at some of these arguments and decide if they lead to the conclusion desired by the users.

1. One of such arguments is that plants feel pain too, so eating plants instead of animals is not necessarily better. Animals eat plants to grow the flesh and produce the secretions that humans eventually eat, so the nutrients humans get from the consumption of animal flesh are not created, *ex nihilo*, by animals. Due to thermodynamics, due to the fact that it is impossible to get *more* nutrients or calories, not even the *same* amount of calories from a system than the amount *introduced* in the system, less plants are mischievously harmed if humans get their nutrition directly from plants. This is due to eliminating the "middleman" between humans and their needed nutrients. Hence this argument leads to the conclusion that less harm and pain, towards plants and animals, is generated if humans eat plants instead of animal products, and not to the conclusion that eating animals is morally justified.

2. Another such argument is that animals die in crop farming as well, so a vegan diet is not morally superior to an omnivorous one. The argument holds that eating a cow every so often is not worse, or even better, than killing hundreds of mice by growing crops for humans. But "if we combine global grazing land with the amount of cropland used for animal feed, livestock accounts for 80% of agricultural land use. Most of the world's agricultural land is used to raise livestock for meat and dairy. Crops for humans account for 16%. And non-food crops for biofuels and textiles come to 4%. Despite the vast amount of land used for livestock animals, they contribute quite a small share of the global calorie and protein supply. Meat, dairy and farmed fish provide just 17% of the world's calories, and 38% of its protein" (Ritchie and Roser 2019). If humans do not want to kill by crop farming and do not want to give up the habit of eating food either, humans ought to avoid eating

the food that causes more crop deaths, i.e. products from animals. The necessity of not eating animals, not killing and taking fewer animal lives will be further discussed in chapter IV.

3. Another argument claims the following: animals cannot understand the law, coexistence between humans and animals is impossible because animals cannot comprehend the rules of societies that allow humans to coexist between themselves. After all, if we were to bring a crocodile in front of the law, the trial would be redundant as the crocodile would be defenceless and lose by default. The subject of this essay is mainly about coexistence but we will begin with this argument. A related argument for the morality of the current treatment of animals is that the law allows humans to treat animals as they do. This argument will be indirectly tackled in the following two chapters whilst the focus will remain on the former.

B. The goals and method of the analysis

This essay`s aim is to challenge the view according to which the animals' failure to comprehend the law implies the impossibility of coexistence with humans, i.e. that there cannot be a society consisting of both humans and animals *if* animals cannot understand the law. After this view is challenged, we will analyse what would be the first step towards a multi- or inter-species community, i.e. what is the first thing that coexistence between animals and human animals requests. The method used in this essay will be the logical analysis of language.

II. Comprehension

Let us suppose, for the sake of argument, that one human has reached the age at which they can be held accountable for their wrongdoings. Is it just to bring such an individual to the court and ask them about the law, such that we can decide whether they are indeed aware of it? If they do not know all the laws that apply in that certain territory, should they be punished for their ignorance? After all, how could some humans coexist peacefully and lawfully with other

humans if some of them are not aware of the laws that they are all supposed to follow?

In the following chapter, after some distinctions will be made, we will examine whether some of the general principles of justice, that most humans already adhere to, allow for the punishment of individuals unaware of the law.

III. Law

A. Terminology

1. *Letter of the law*. The letter of the law, as the name suggests, represents what is actually written in the code: the literal meaning of the law. For example, in Romania pigs can be killed in a gas chamber as long as the concentration of CO_2 in the gas chamber is at least 70%, and as long as the pigs can see each other in the chamber, as well as other criterions. (O. nr.180/11-08-2006)

Even when the letter of the law protects animals in some limited ways, humans find ways to "cheat". Matthew Liebman offers examples such as one from Oklahoma, in 1963, in which, even with laws against animal fighting, in the case of the defendants who were charged for taking part in cockfighting, "the court […] ruled held that "the men of `ordinary intelligence`" could not be certain that the statute covered roosters" (Liebman 2011).

2. *Spirit of the law*. The spirit of the law refers to the reason of a law, what the legislator had in mind when they proposed that law. The letter of the law has some downsides; loopholes can be found and are being found by individuals who want to perform acts similar enough to those prohibited by law that they are identical in morality, but differ from those acts in one or more technicalities and, hence, are allowed by the letter of the law. The spirit of the law refers to the "deeper" reason of the letter of the law. The letter of the law must be specific enough so it does not lose its applicability, it must use specific definitions in order

to avoid “grey areas”, in which an act is neither legal nor illegal. If the letter of the law allowed for pigs to be killed in gas chambers under certain criterions, then the spirit of this law, and other such laws, is that humans can take the lives of animals as long as they are not “overly” cruel.

3. *General principles of justice*. General principles of justice are even vaguer than the spirit of the law. One way to interpret this is that the letter of the law decides what individuals can or cannot do and the general principles of justice, ideally, decide what laws are just or not. They are mostly, in the day-to-day use, too general, as the name suggests, to effectively judge a specific act done under specific situations.

B. Reductio ad absurdum (in favour of three general principles of justice)

We do not believe we can positively “prove” these principles, but we will argue that not accepting them, not only would be unpractical, but would be absurd as well.

1. *Innocent until proven guilty*. We shall argue that one general principle of justice is that individuals are innocent until proven otherwise. Real societies would have a wide range of rules regarding housing, payment, food, propriety, crime, family and so on. Not only these are multiple general areas of law, but these areas would have multiple laws that apply simultaneously. Hence, we have hundreds upon hundreds, if not thousands upon thousands, of laws that apply at the same place, at the same time. If we do not accept that individuals are innocent until proven guilty, everyone would have to prove, as often as possible, that they did not break any of these thousands of laws. One more problem with not accepting this principle is that it would have to make individuals prove negatives, which, as far as logic is concerned and as far as empirical statements go, may be impossible

in some cases. If someone were to prove, for example, that they did not steal a certain small object, such as a ring, they will be faced with “accusations” that not only did they stole the object, but that they hid it, sold it on the black market and so on. Innocent until proven guilty can have a procedural role in criminal law, but as we have shown that it is, in essence, avoiding the *shifting of burden of proof* fallacy, we will still consider it as being a general principle of justice. As this principle is not the main focus of the essay, we hope that we can generally agree that it is absurd for individuals to have to prove their innocence in the case all possible crimes. In this regard, we will consider it fair for the accusation to need to bring proof that someone broke a certain law. Note that we use “crime” in a broader sense, not as referring to the breaking of criminal law, but to breaking laws in general.

2. *Proportionality between crime and punishment.* We consider crimes are acts that disturb the wellbeing of individuals or the proper functioning of the society. The more disruption an individual does, the more severe the punishment should be. If there would be smaller punishments for lesser crimes, then an individual that already broke a „small” law would be inclined to continue disturbing society in order to reduce the severity of the punishment they would receive. Hence, if we prescribe more punishment for bigger crimes, we are better equipped to prevent bigger crimes from happening based on the rational self-interest of the offender.

3. *Guilty for crimes performed*. This, albeit hard to call it a general principle of justice, refers to declaring individuals who actually perform crimes as offenders. We believe thought-crimes are a matter of dystopian worlds. Not only we are not yet able to objectively detect subjective thoughts, but thinking of breaking the law does not disturb society. Unless an individual actually broke the law, we believe it is unjust to treat them as if they did. Unless an individual actually broke

the law, we should believe it is unjust to treat them as if they did, regardless of the fact that they are aware of it – the law – or not.

With all these general principles of justice on the table, we can return to the example offered in chapter II and say that it is not according to these general principles of justice to prosecute an individual unaware of the law. First, we would need to have evidence or reasonable suspicion that they broke any law at all. Then we would have to prove the severity of their ignorance in the case that they did not, indeed, disturbed society in any meaningful way. Then punishment, such as restriction of movement, is justly applied only to those who deserve it, i.e. those who disturbed society. Capital punishment, if we were to revive it from the dark depths of the past, should only be applied to those who perform the worst of crimes.

C. Are animals being punished?

Animals have a severe restriction of movement: at least in the case of farmed animals, they are limited by cages and the will of the "owner". Animals are being killed for food and one could argue that animals receive "capital punishment" for being born in the wrong species. Others could argue that animals are being "sacrificed", thus we will examine a few ways in which one can lose their life in order to decide what is the case for farmed animals.

IV. Existence

A. A taxonomy of death

We must begin by stating that what follows is not an exhaustive list of ways for one to lose their life, nor it is the only or best way to classify the methods in which one can die. But the reasoning behind using the following classification will perhaps be made more apparent when we will make the logical analysis of the language shared with the arguments mentioned in previous chapters.

One can die or be killed. To die is to lose one`s life as a result of what we would call "natural causes" such as age or disease. To be killed means to lose one`s life as a result of an individual`s (or a group`s) actions. To be killed can happen incidentally or intentionally. To be killed incidentally means that the individual who killed did not intend for their action to lead to the death of the one who loses their life. In this case, the one who kills is not necessarily morally evil or an unjust person, but rather, that they were not aware of their surroundings or the consequences of certain actions in a particular situation. To be killed intentionally can happen either in accordance or against the will of the one who is killed. Three ways in which someone can be killed intentionally in accordance with their will are assisted suicide, suicide and sacrifice. In assisted suicide and suicide, the "goal", so to speak, of the actions leading to the loss of life is the loss of life itself. In assisted suicide one is killed according to their will by someone else, mostly for the negative benefit of themselves and, potentially, of others. This "benefit" is "negative" in the sense that, perhaps due to age or illness, one considers their own life as a burden to themselves, and/or to others, such that they do not want to deal with the certain future pain or suffering. In some situations, others can benefit negatively from the assisted suicide of those who are dependent on their help and care, by not having to spend scarce resources for the care of those unable to sustain themselves. Suicide happens when someone dies as a direct consequence of their own actions in the sense that the goal of the actions is to kill themselves. If the goal was not to kill, the death would be incidental. Sacrifice happens when someone willingly, or intentionally, gives up their live for the benefit of others. The goal of the actions leading to this loss of life is not the death itself, but the positive benefit of others, i.e. so others can live better lives.

One can be killed intentionally by others, against their own will either “justly/deserved”, or “unjustly/undeserved”. We will give two examples when individuals could be killed “justly” or “deserved” against their will. First, if we were to revive capital punishment, then, by definition, we would justly perform a punishment on an individual who committed the worst of crimes. Secondly, one could be “justly” killed intentionally against their will if they pose an immense threat to others, such that the others would kill in self-defence. We will give two examples in which an individual might be killed without “deserving” it, noting that, in these examples, the most relevant part is the difference between them, and not that we chose to call them “deserved” and “undeserved” losses of life. The first way is murder. For the purposes of this essay, the most important part of murder is that it is the *premeditated* act of killing someone intentionally against their will. Indeed, one could *spontaneously* murder, but what is important for now is that premeditation implies murder in the case of killing intentionally against the will of someone who does not deserve it. Premeditation, hence, implies murder, but the reverse is not necessarily true. The second way is in self-preservation. The most important part is that killing in self-preservation involves a sort of *spontaneity* in a situation in which the act of killing is performed when the goal is the survival of the one who kills, whilst the one who is killed is not the threat to the life of the killer, but rather, the one killed was unfortunate to be in the proximity of someone in a desperate situation.

B. Contradiction, spontaneity and premeditation

1. Contradiction. We have arrived at the point we hoped to reach in section III C. If one would argue that the killing of animals for food is actually “capital punishment”, then the act would be legal and, perhaps, just. The crime the animals would be punished for is not of our interest, just that the systematic killing of animals would follow the

principles of a nation that, more productively or not, would endorse capital punishment. After we explore the fundamental contradiction that we will put forward next, we could argue that the last line of defence of animal exploitation would be the argument that their killing is indeed an act of capital punishment.

The contradiction we face is related to the nature of "sacrifice" and the reality of the killing that farm animals face. We started from the supposition that animals, being unaware or lacking comprehension of law, are unable to coexist with humans. Next, we can argue that law is made such that individuals do not negatively impact others. The law restricts some of the liberties of individuals for the greater benefit of others or society. Those who willingly respect the law are those who willingly restrict their actions or liberties for the greater good of others. This is what "sacrifice" is in general. Now, if we call the killing of animals "sacrifice", we admit that animals *are* able to willingly give up something for the greater good of others. We supposed animals cannot comprehend the law, and hence, cannot coexist with us. At the same time, we recognise that the law is made such that it punishes those who do not willingly give up something, such as liberties, for the greater benefit of others. We are, therefore, unable to reasonably call the act of killing animals "sacrifice", not only as it supposes that animals are able to willingly give up something for the benefit of others, but that they do not lack a sort of agency, which, again, is implied in our supposition that they cannot comprehend the law, let alone follow it.

2. Spontaneity and premeditation. Anticipating a possible response, and for the purpose of clarity, we will analyse the nature of killing animals for food in order to classify it in the suitable category of killing that we have provided in section IVA.

We are unable to classify the killing of animals for food as an act done in self-preservation. Breeding, raising and killing animals takes time, especially the raising part of the process. After having spent

months to raise an animal, if we want to be honest, we cannot say that we must kill the animal in order to survive. If we start raising an animal so that, hopefully, in a month or so, we can kill her in order for us to "preserve" ourselves, we *intentionally* put ourselves in the situation in which killing the animal is primarily done in "self-preservation" in the first place. The act, therefore, is not spontaneous. If the killing is foreseen for days, let alone months, and it is planned accordingly, then the killing is *premeditated*. But premeditation implies murder in the case of killing intentionally against the will of someone who does not deserve it. We must admit that, all along, we have talked about murder. Hence the saying "meat is murder" proves to be relatively accurate.

3. Presupposing the impossibility of coexistence. Before going to the moon, the human mind could have conceived it as impossible for a human being to reach the surface of the moon and come back safely. Before it was proved as possible, theoretically and practically, it was easy denying the possibility of such an act. Instead of supposing that there is no solution to the problem, it was more fruitful to search and attempt solutions, i.e. it is more productive to search for solutions to the problems that we are being faced with instead of making excuses out of the problems that are bothering us. This is how it is possible for the first steps to be made today in engineering so that the first step on the moon can be achieved later.

There are a lot of similarity breakers between moon-landing and coexisting with animals, but our focus will be on the first steps made today that can lead to the bigger steps in the future. These first steps are enabled by using reason to find solutions rather than presupposing that coexistence is impossible. The goal of this chapter can be disclosed as the tautology that it is: there cannot be co-"existence" without "existence". There is no coexistence with animals if no "existence" is performed by the animals. Hence, existence is the first step towards

coexistence. Implicitly, the first step of those unwillingly to deny the possibility of coexistence with animals is to stop practicing those actions that necessarily lead to the killing of animals, i.e. buying animal products and other exploitative behaviours.

V. Coexistence

A. Conflicts

We will leave the specifics of how humans would best behave during coexistence with animals on the hands of ethologists and others of sort. We will focus on the coexistence in its most basic form.

If humans are to coexist with other animals, conflicts will almost certainly appear. In this case we can distinguish between indirect and direct conflicts. Indirect conflicts will be defined as the situations in which two parties claim that a certain natural resource is their own. We will call direct conflicts those situations in which one party claims they are rightfully owed another party. We will focus our analysis on direct conflict as it is, so to speak, the other face of the coin that we called "the first step" above. One example of direct conflict is when party X (let us say, a specific human) claims that they are rightfully owed the life and body of party Y (a certain animal), i.e. that Y has the moral duty to give their flesh, and implicitly their life, to X. X claims that it is morally permissible for them to take the life of Y. In case we have not yet agreed that it is wrong to kill animals that do not deserve it, as a precautionary measure, we can provide a problem for any current or future human who believes that they are morally justified in taking the life of any other animal.

B. The logical analysis of the moral burden of proof

We must begin by analysing more precisely what every party claims (in the literal sense): when X claims that they are morally justified in taking the life of Y, it is actually *not only* the life of Y that

they believe that they are entitled to, but the life of themselves as well. When X claims that they can do as they please with Y, they claim that *they* can do so. Hence X claims that X can decide what X does to Y. Y only claims that Y can choose what happens to Y. For the purpose of clarity, we will generalise "Y" as individuals who only claim that individuals are entitled to their own life and body and "X" as individuals who claim that individuals are, not only entitled to their own life and body, but entitled to the lives and bodies of others as well.

We are able to use Occam`s razor or the principle of parsimony to settle the dispute between X and Y, i.e. a proportionality test. In every possible world in which, as X upholds, individuals are entitled to their own lives and bodies as well as the lives and bodies of others, *individuals are entitled to their own lives and bodies*; but *not* in every possible world in which, as Y upholds, individuals are entitled to their own lives and bodies, *individuals are entitled to the lives and bodies of others as well*. Hence the moral and ontological commitments of the position of X are far greater than those of the position of Y. If we want to grant the request of X, we must implicitly grant the request of Y. On the other hand, if we grant the request of Y, we do not grant everything that X claims. In this position, to make the commitment from Y to the position of X, we will need more proof. In other words, in the case of an individual who only claims that they are entitled to their own life and body versus the individual who claims that they are entitled to their life and body as well as those of others, the burden of proof is on the latter.

This problem must not be avoided by all of those who want to propose a consistent moral framework. All who want to kill must present what are the conditions in which killing is consistent with the moral cost of killing, i.e. the moral-ontological cost difference between granting entitlement to *one`s own life* and granting entitlement to *one`s own life as well as the life of others*.

C. A potential way to meet the moral burden of proof

Previously we were inclined to believe that killing in self-defence is a permissible action if the situation calls for it, but it may seem that the logical analysis of the moral burden of proof has led us to the point in which not even killing in self-defence is permissible. What we must take into consideration before we definitively declare killing in self-defence as being not morally permissible is, again, the difference between X and Y. In other words, the key is in the status of Y when X pursues to act *as if* the moral burden of proof of their position is met, when it is obviously not. If Y does not consent, then the burden is *not* actually fulfilled, hence Y can defend themselves in order to avoid the *curse of knowledge* cognitive bias. If X acts *as if* they do not know that the burden is not met, then Y can behave as if X does not know that the burden is not met. In some sense, Y consents to the rules that X tries to play by, therefore acting according to both the rules of Y and X. X could be inclined to claim that the burden is met and ask Y to prove the contrary, but this argument commits the *shifting of burden of proof* fallacy.

We can refer to the situation in which people ask why is it wrong to murder animals instead of providing proof that *they* have sufficient reason to do so; also to the situation in which it is argued that, since animals lack the capacity for using language or to do philosophy, or lack consciousness, culture, etc., it is therefore justified to exploit them. When someone claims that the basis for the moral evaluation of an action is the lack of a certain feature in the other person, they must prove this claim. This claim, being, not only a negative statement, but a universal one, is relatively hard to prove, hence scepticism is the most rational position towards such statements. This is a clear example of the *shifting a burden of proof* fallacy since we must only claim that the person who says this also lacks the same features that animals

supposedly lack and justify any act against their wellbeing, but most humans will recognise that simply claiming that they are not aware or conscious, or are unable to use language, is not enough to prove that they lack these properties, i.e. they have these properties independent of the scepticism or ignorance of others. This analysis points to a general idea that the moral burden of proof may be met on the basis of *what-is-proven-to-be* and not on *what-is-(pre)supposed-to-lack* or *what-is-claimed-to-lack*.

We can consider that killing in self-defence is avoiding the *curse of knowledge* in face of someone blessed by ignorance, with the condition that killing is reserved for the worst of situations, immobilisation being the limit in situations in which defence does not necessitate killing. This must be the case only in the situation in which someone *actually* does something that "endangers" the other, so to speak. This is to prevent the argument that animals would overthrow humanity if humans did not murder them by the billions. Cows will not overthrow humanity if we do not kill them, nothing suggests that they will actually do to us as we do onto them. On this view someone may kill in self-defence only the cows that aggravate first i.e. not the innocent, factory farmed animals. The projected will to dominate the other stands in need for proof, and, hence, it cannot be used to fulfil the moral burden of proof. The presupposed lack of mercy of the cows is just that, a presupposition, projection, and a statement standing in the need for proof.

Self-defence is, therefore, a situation in which killing *may* meet the moral burden of proof necessary for such an act, as it depends on others to act in such a way that enables a truly self-defence kill. Perhaps there are more ways in which the burden can be met, but the burden is on the one who does the killing. Again, the evidence for the morality of the action must be provided by the one who commits it, so it is not logical for us to wait for the party being killed to provide evidence that

the killing is immoral. Thus the evidence for the morality of the action must be provided by the one who commits it even when the ontology of the proof is generated or depends on someone else.

VI. Conclusions

We began with the idea that lack of comprehension of law rules out coexistence, so the sacrifice of animals may be morally justified, but this was proven to be self-contradictory as "sacrifice" implies agency and the capacity to willingly forgo liberties for the greater good of others. Then we came across the tautology that not existing prohibits coexisting, and ended with the statement that those who want to put an end to the existence of others are those who must provide proof for the morality of the action.

Whatever principles of justice we want to adhere to, they are useless unless we agree upon the necessity of consistency. It is redundant to adhere to a principle of justice if we also believe that there are just actions are not consistent with the principle. Hence cognitive dissonance is the greatest enemy of morality. It is redundant to "convince" someone of principles such as "live and let live" if they already believe in them but decide to make exceptions when it is *their* turn to let others live.

This call for consistency must be taken at every level. For the purpose of coexistence, the general principles of justice that we adopt should be internally consistent and consistent with the others principles. For the same purpose, the spirit of the law should be consistent with the general principles of justice and so on.

If the judgements from chapters V B and V C are correct, then avoiding fallacies, personal or of others, acting without cognitive dissonance and biases, and agreeing to the rules that other act by or want to act by, is a possible way in which one can act in a manner that fulfils the moral burden of proof.

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